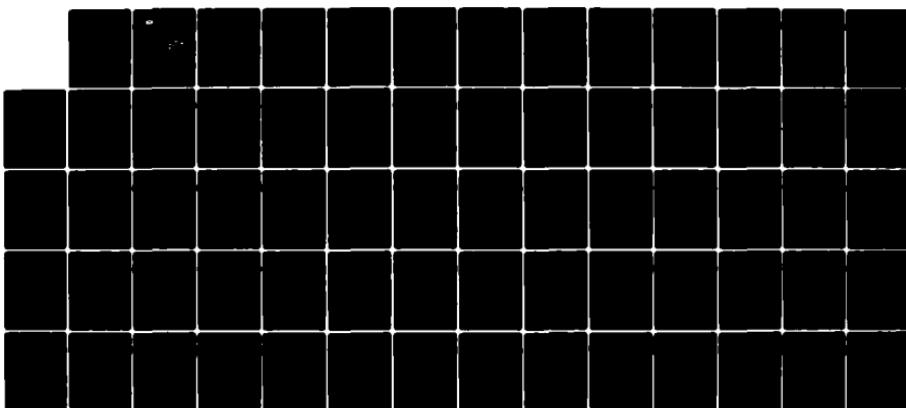


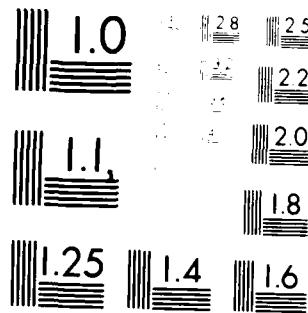
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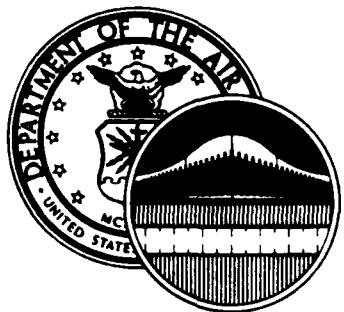
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UNITED STATES AIR FORCE

ADA 130957

# OCCUPATIONAL SURVEY REPORT



VEHICLE MAINTENANCE CONTROL AND ANALYSIS  
CAREER LADDER

AFS 472X4  
AFPT 90-472-460  
JUNE 1983

AUG 1 1983

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OCCUPATIONAL ANALYSIS PROGRAM  
USAF OCCUPATIONAL MEASUREMENT CENTER  
AIR TRAINING COMMAND  
RANDOLPH AFB, TEXAS 78150

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HQ SAC/LGMQ (ATCLO)	1	1		1
HQ TAC/DPAT	3	3		3
HQ TAC/DPLATC	1	1		1
HQ USAF/MPPT	1	1		1
HQ USAFE/DPAT	3	3		3
HQ USAFE/DPATC	1	1		1
HQ USMC (CODE TPI)	1	1		
LMDC/AN	1			
NODAC	1	1		
3330 TCHTW/TTGX (CHANUTE AFB IL)	5	2	2	9
3507 ACS/DPUI	1	1		

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AFS 472X4 OSR AND SUPPORTING DOCUMENTS

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## PREFACE

This report presents the results of a detailed Air Force occupational survey of the Vehicle Maintenance Control and Analysis career ladder (AFS 472X4). AFR 35-2 contains the authority for conducting occupational surveys. Computer products used in this report are available to operating and training officials upon request.

First Lieutenant Kevin F. Morefield, Inventory Development Specialist, developed the survey instrument and Sergeant Harold R. Tackett provided computer support. Captain Levon Simmons, Occupational Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78150.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies may be obtained upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150.

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# Specialty Training Standards

## SUMMARY OF RESULTS

1. Survey Coverage: This report is the result of an analysis of a survey of 337 of the 450 assigned 472X4 personnel, for a 76 percent sample. This sample was representative across major commands and paygrades.
2. Specialty Jobs (Career Ladder Structure): Two clusters and four independent job types were identified in the analysis. Both clusters and two of the independent job types (84 percent of the sample) were directly involved in day-to-day vehicle control, analysis and scheduling functions. One independent job type (six percent of the survey sample) was involved with supervisory functions. The last independent job type (one percent of the survey sample) was involved in instructional duties. The analysis generally supports the current single-ladder classification structure.
3. Career Ladder Progression: The 3- and 7- skill level jobs were highly technical. Seven-skill level members, although still performing many technical tasks, spent an appreciable amount of their duty time in supervisory, managerial, or administrative functions.
4. AFR 39-1 Specialty Descriptions: The description for the 3-and 7-skill level jobs accurately portrays the technical nature of the jobs. In addition, the staff and supervisory functions are clearly set out in the 7-skill level description.
5. Training Analysis: Both the STS and POI require review for possible adjustments. Some elements and proficiency codes in the STS do not appear to be supported by survey data.
6. Implications: Some areas of the career ladder training documents (STS and POI) require a thorough review at the forthcoming 472X4 Utilization and Training Workshop. The misutilization of other 472XX personnel to perform 472X4 functions also requires review by functional managers across these specialties.

**OCCUPATIONAL SURVEY REPORT  
VEHICLE MAINTENANCE CONTROL AND ANALYSIS  
CAREER LADDER  
(AFS 472X4)**

**INTRODUCTION**

This is a report of an occupational survey of the Vehicle Maintenance Control and Analysis career ladder (AFS 472X4) completed by the Occupational Analysis Branch in May 1983. This project was requested by the 3340 Technical Training Group at Chanute AFB IL to obtain occupational survey information for use in evaluating the effectiveness of the STS and POI. This is the first survey of the 472X4 career ladder since it was created in October 1978.

**Specialty Background**

Prior to 1978, Vehicle Analysis was a shred under AFSC 391X0. The 391X0 career ladder was established in September 1960 as the Maintenance Analysis Specialty, AFS 434X0. The career ladder was changed to AFS 391X0 in March 1970. In the 1970 reorganization, the 5- and 7-skill level Maintenance Analysis incumbents were split into three shredsouts: (1) Aerospace Weapons System; (2) Communication-Electronic; and (3) Motor Vehicle. Three-skill level incumbents were not given shred designations until January 1973. The 391X0C shredout was realigned in 1978 into the Vehicle Maintenance area as a completely separate specialty, AFS 472X4, Motor Vehicle Analysis, and the Maintenance Manager (CEM Code 39300) was added to specialty structure.

A previous occupational survey of the Maintenance Systems Analysis specialty (AFS 391X0A/B/C) was performed in October 1973. The survey instrument for the 1973 report, AFPT 90-391-104, consisted of 227 tasks grouped under ten duty sections and a background information section of 45 variables. The previous inventory surveyed 750 Maintenance Analysis respondents.

As described in AFR 39-1 specialty descriptions, personnel in the 472X4 career ladder are responsible for planning, scheduling, and coordinating vehicle maintenance requirements; analyzing maintenance data and developing visual presentation media; analyzing vehicle maintenance performance data; determining, reviewing, preparing, and coordinating source data input/output requirements with data automation; and supervising maintenance control and analysis personnel.

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Primary entry into this career ladder is from another 47XXX career field through a Category A seven-week formal training course (3ALR47234) conducted at Chanute TTC IL.

## SURVEY METHODOLOGY

### Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-472-460. As a starting point, tasks from the 391X0 inventory were reviewed for currency. A new tentative task list was then developed which included useable tasks from the prior inventory, as well as new tasks obtained from a thorough research of current specialty publications and directives. This tentative task list was refined and validated by course personnel at the Chanute Technical Training Center (CTTC) and a number of subject-matter specialists at operational bases. The resulting inventory contained 227 tasks grouped under seven duty headings. Also included in the inventory was an extensive background section that requested information such as:

- (A) Job satisfaction
- (B) Time in present job
- (C) How does your job utilize your talents?
- (D) How does your job utilize your training?
- (E) Job Title
- (F) Level of assignment
- (G) Prior technical school attended

### Survey Administration

From June 1981 through September 1981, consolidated base personnel offices in operational units worldwide administered the job inventory to incumbents holding the DAFSC 472X4. These DAFSC 472X4 personnel were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Each respondent who completed a job inventory first completed an identification and biographical information section and then checked all tasks performed in his or her present job. Those tasks checked were then rated on a nine-point scale indicating the relative amount of time spent on that task as compared to all other tasks checked. The ratings varied from one (very small amount of time spent) to nine (very large amount of time spent), with a rating of five representing an average amount of time spent in performing a task.

To determine the relative percentage of time spent on each task checked by a respondent, all of the incumbents' ratings are assumed to account for 100 percent of the time spent on the job. These ratings are totaled and each task rating is then divided by the total number of task responses. The resulting quotient is then multiplied by 100 to give the relating percent of work time spent for each task. This procedure provides a basis for comparing all tasks in terms of both percent members performing and relative percent time spent.

### Data Processing and Analysis

Once job inventories are returned from the field, they are visually checked to ensure proper completion. Then both task and background data from the inventories are entered into a computer to form a complete case record for all respondents. From this data, computer products are generated and a report is written based on their analysis.

### Survey Sample

Incumbents were selected to participate in this survey to ensure an accurate representation across all MAJCOM and paygrade groups. Tables 1 and 2 display the distribution of assigned and sampled personnel by major command and paygrade groups, respectively. Table 3 reflects the distribution of the survey sample in terms of months Time In Career Field (TICF). As demonstrated by these tables, the overall sample was representative of the career ladder population as a whole.

TABLE 1

COMMAND REPRESENTATION

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
SAC	21	24
TAC	20	22
USAFE	17	18
MAC	12	12
PACAF	11	8
AFSC	4	5
AAC	3	4
OTHER	<u>17</u>	<u>7</u>
<b>TOTAL</b>	<b>100</b>	<b>100</b>

TOTAL 472X4 ASSIGNED - 450  
TOTAL 472X4 SAMPLED - 337  
PERCENT SAMPLED - 74%

TABLE 2  
PAYGRADE REPRESENTATION

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AIRMAN	20	20
E-4	20	20
E-5	35	37
E-6/E-7	42	40
OTHER	<u>3</u>	<u>3</u>
TOTAL	100	100

TABLE 3  
TICF DISTRIBUTION\*

	<u>MONTHS IN CAREER FIELD</u>		
	<u>1-48</u>	<u>49-96</u>	<u>97+</u>
NUMBER IN SAMPLE	207	67	63
PERCENT OF SAMPLE	61%	20%	19%

\*TIME IN CAREER FIELD (LATERAL AFSCs)

### Task Factor Administration

In addition to completing a job inventory booklet, selected senior 472X4 personnel were asked to complete a second booklet for either task difficulty or training emphasis. The task difficulty and training emphasis rating booklets were processed separately from the job inventories. These ratings were then used in a number of different analyses discussed in more detail within the report.

Task Difficulty. Each senior NCO completing a task difficulty booklet was asked to rate all of the tasks on a nine-point scale from extremely low to extremely high difficulty, with difficulty defined as the length of time it takes an average incumbent to learn to do the task. Ratings were then adjusted so tasks of average difficulty reflect a rating of 5.00 and a standard deviation of 1.0.

Task difficulty data were independently collected from 51 experienced 7-skill level personnel stationed worldwide (see Table 4). The interrater reliability (as assessed through components of variance of standard group means) of .93 for these 472X4 raters reflected very high agreement. The resulting data was a rank ordering of tasks indicating a relative degree of difficulty for each task in the inventory.

Training Emphasis. Individuals completing training emphasis booklets were asked to rate all of the tasks on a ten-point scale from no training required to extremely heavy training required. This data was used to calculate a rank ordering of tasks indicating where the emphasis should be placed on structured training for first-job personnel in the 472X4 career ladder. Structured training is defined as training provided at resident technical schools, field training detachments (FTDs), mobile training teams (MTT), formal OJT, or any other organized training method.

Training emphasis data were independently collected from 57 experienced 7-skill level personnel stationed worldwide (see Table 4). The percentage of Training Emphasis (TE) rating returns for TAC is unusually high, while the percentage of Task Difficulty (TD) rating returns for PACAF is unusually low. Overall, although task difficulty and training emphasis booklets were returned at various rates from using commands, the data appear generally representative. The interrater reliability (as assessed through components of variance of standard group means) for these raters was .97, indicating a very high agreement among raters as to which tasks required some form of structured training and which did not. In this specialty, tasks rated high in training emphasis show ratings of 4.43 or above (one standard deviation above the mean); the average training emphasis rating was 2.57; and those tasks with ratings less than 1.86 were considered as requiring very little emphasis in training.

When used in conjunction with other factors, such as percent members performing, the task difficulty and training emphasis ratings provide insight into the requirement for training. The information these ratings provide can help improve both training and overall career ladder management.

### Training Documents

Occupational survey data are very useful for examining the currency of Speciality Training Standards (STSs) and Plans of Instruction (POIs). These data can indicate areas of an STS or POI that should be reviewed for additions or deletions based on percentage of members performing tasks and other task factors.

To assist in this analysis, subject-matter specialists (SMS) at the technical training center compare the job inventory task list with the STSs and POIs. Where applicable, the SMSs match each task to the STS or POI item(s) that best cover that task. Tasks that fit under no present STS or POI item are left unmatched. Based on this matching, computer products are generated that assist in analyzing the training documents in accordance with ATCR 52-22.

Because survey data is only one of many inputs into training decisions, the result of this training analysis is a recommendation of STS or POI items for review by training officials.

Before examining training issues, it is appropriate to first understand the types and differences of the jobs within the specialty.

TABLE 4  
COMMAND DISTRIBUTION OF TASK DIFFICULTY  
AND TRAINING EMPHASIS RATERS

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF TASK DIFFICULTY RATERS</u>	<u>PERCENT OF TRAINING EMPHASIS RATERS</u>
SAC	21	20	14
TAC	20	20	35
USAFE	17	22	18
MAC	12	12	11
PACAF	11	4	8
ATC	4	16	4
AFSC	4	2	2
AAC	3	2	5

## SPECIALTY JOBS (Career Ladder Structure)

Within most career ladders, there are usually a number of different jobs performed. The jobs may differ due to the tasks being performed, varying amounts of time spent performing the tasks, or the number of tasks the incumbents perform. Background variables, such as major work area, job title, and major command, usually correlate with differences in task performance and help explain why the differences exist.

To identify the jobs being performed, the responses of job incumbents are input to a computer which mathematically computes a hierachial clustering of the returns, based on a comparison of the tasks performed and the similarity of relative time spent on tasks performed. Subsequently, a diagram is drawn which reflects groups of individuals who have similar task performance. These groups are compared to one another and a resulting job structure is identified for the career ladder.

Analysis of the data collected shows the Vehicle Maintenance Control and Analysis career ladder divides into two job clusters and four independent job types. Respondents forming these clusters and independent job types accounted for 90 percent of the total survey sample. The remaining 10 percent of the sample consisted of individuals who did not group into any of the major job groups.

The job groups found within the 472X4 survey sample are listed below, along with the number of people forming each group and a GRP identification number used in cross-referencing to computer printouts provided to selected users. Figure 1 illustrates the relationship between the groups.

### I. VEHICLE PRODUCTION CONTROL CLUSTER (GRP026, N=94)

- A. Vehicle Control Analyst (GRP099, N=34)
- B. Vehicle Maintenance Analyst (GRP094, N=7)
- C. Vehicle Scheduling Analyst (GRP121, N=6)

### II. VEHICLE PRODUCTION ANALYSIS CLUSTER (GRP037, N=141)

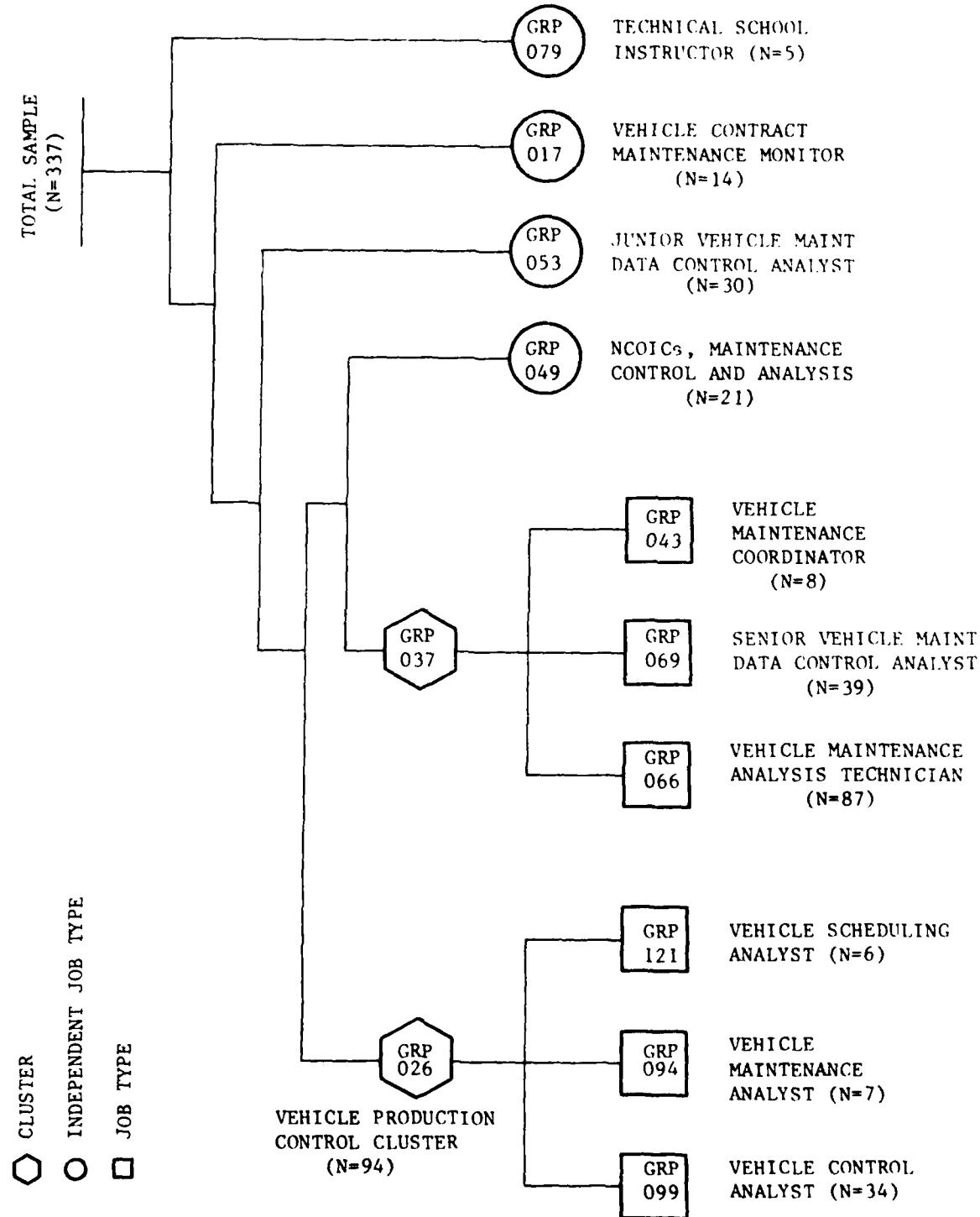
- A. Vehicle Maintenance Analysis Technician (GRP066, N=87)
- B. Senior Vehicle Maintenance Data Control Analyst (GRP069, N=39)
- C. Vehicle Maintenance Coordinator (GRP043, N=8)

### III. NCOIC, MAINTENANCE CONTROL AND ANALYSIS (GRP049, N=21)

### IV. JUNIOR VEHICLE MAINTENANCE DATA CONTROL ANALYST (GRP053, N=30)

### V. VEHICLE CONTRACT MAINTENANCE MONITOR (GRP017, N=14)

FIGURE 1

VEHICLE MAINTENANCE CONTROL AND ANALYSIS CAREER LADDER STRUCTURE  
(AFS 472X4)

VI. TECHNICAL SCHOOL INSTRUCTOR (GRP079, N=5)

Job Group Descriptions

The following paragraphs are brief descriptions of the clusters and job types identified in the specialty structure analysis. Further background information on the clusters and job types are listed in Tables 5 through 10. Appendix A also lists representative tasks, differentiating tasks, and additional background information for each of the clusters and job types discussed in the analysis.

I. VEHICLE PRODUCTION CONTROL CLUSTER (GRP026, N=94). Members of this cluster (28 percent of the survey sample) perform virtually all facets of the Vehicle Maintenance Control and Analysis career ladder. Incumbents in this cluster spend 56 percent of their time performing tasks in the maintenance control function, a clearly distinctive job from other duty areas. Although they perform 191 of 227 tasks, 80 percent of their time is spent on only 54 tasks, 29 of which are maintenance control. The vast majority of incumbents in the cluster perform an essentially similar analysis process, with an average of 41 tasks. Members perform final closeout and verification of work orders, prepare vehicle historical record forms (AF Form 1828), answer inquiries by or notify organizations concerning vehicle status, prepare work order log and quality control record forms (AF Form 754), identify vehicles on vehicle deadlined for parts status that require scheduled maintenance, and review vehicle historical record forms (AF Form 1828) for repetitive maintenance.

The majority of cluster members (78.7 percent) hold 47234 DAFSC (see Table 5). The average grade is almost that of E-5, with an average TICF of 17.8 months. Seventy-three percent find their job interesting, while 79 percent feel their talents are well utilized. Likewise, 75 percent feel their training is well utilized (see Table 5). The cluster contains numerous job types, three of which will be described to show the major variations in job content. Primary differences between the job types concern differences in types of vehicle maintenance data used, and the average number of tasks performed.

A. Vehicle Control Analyst (GRP099, N=34). Representing 10 percent of the survey sample, the 34 airmen in this group perform a job that differs from others in the cluster because of the higher percentage of their time spent on tasks involving maintenance control functions. Incumbents perform final closeout and verification of work orders, answer inquiries by or notify organizations concerning vehicle status, maintain status boards, graphs, or charts, prepare vehicle historical record forms, prepare vehicle and equipment work order forms, and review motor vehicle equipment work orders for correctness of information to be keypunched.

B. Vehicle Maintenance Analyst (GRP094, N=7). Representing two percent of the survey sample, the seven airmen in this group perform considerably fewer tasks (109) than the overall cluster (191). Their job is somewhat more specialized, centering around the maintenance analyst aspect of

the career ladder structure. Incumbents identify vehicles on vehicle deadlined for part status that require schedule maintenance, review vehicle historical record forms for repetitive maintenance, review punch card transcript forms, establish maintenance schedules, answer inquiries by or notify organizations concerning vehicle status, and analyze vehicle intergrated management system (VIMS) inputs or reports.

C. Vehicle Scheduling Analyst (GRP121, N=6). Representing two percent of the survey sample, the six airmen in this group, like the previous group, perform considerably fewer tasks (90) than the average for the cluster (191). The vast majority of their time (60 percent) is spent on maintenance control functions. Incumbents compare estimated cost to actual costs of repairs, prepare deferred maintenance parts requests, document accident repair actions, calculate vehicle repair costs, identify vehicles on vehicle deadlined for parts status, and prepare vehicle historical record forms.

II. VEHICLE PRODUCTION ANALYSIS CLUSTER (GRP037, N=141). This is the largest cluster (42 percent of the survey sample), and its members perform all facets of the Vehicle Maintenance Analysis and Control career ladder. Sixty-four percent of this group's time is spent performing two of seven duty functions, maintenance analysis and maintenance control, 42 and 22 percent respectively. Seventy-five percent of their time is spent performing 100 of 227 tasks, with 45 tasks from the maintenance analysis function, while 22 tasks are from the maintenance control function. This group performs a relatively unique job from other survey members. Incumbents analyze vehicle integrated management systems (VIMS) inputs or reports, review VIMS data, analyze computer listings other than Air Force on-line data system (AFOLDS), issue USAF vehicle serv-o-plate forms (AF Form 1252 or 1252A), analyze performance indicator data, and compile data for motor vehicle maintenance summaries.

This cluster is equally represented by 47234 and 47274 personnel (48.2 percent each, see Table 6). The average grade is E-5 with an average TICF of 60.7 months. Eighty-four percent find their job interesting, while 87 percent feel their talents are well utilized. Likewise, 81 percent feel their training is well utilized (see Table 7). The cluster contains numerous job types, however, only three will be highlighted to show disparities. Primary differences between the job types concern differences in levels of assignment, types of vehicle maintenance data used, and the average number tasks performed by job incumbents.

A. Vehicle Maintenance Analysis Technician (GRP066, N=87). Representing 26 percent of the survey sample, the 87 incumbents in this group perform a job that differs from others in the cluster because of the number of incumbents involved in supervisory functions (69 percent). The average number of tasks performed by this group is 118 compared to 96 for the cluster. The average number supervised is 4, compared to 3.7, 2.8, and 1.2 for the other job types (see below). Incumbents analyze VIMS inputs or reports, write correspondence, prepare VIMS documentation, analyze computer listings other than AFLODS and BLIS retrievals, coordinate vehicle maintenance problems with other units or agencies, and determine work priorities.

B. Senior Vehicle Maintenance Data Control Analyst (GRP069, N=39). Representing 12 percent of the survey sample, the 39 incumbents in this group perform a more specialized job when compared to the overall cluster. Fifty-nine percent of this group's time is spent performing maintenance analysis functions. Incumbents analyze VIMS inputs or reports, review VIMS data, analyze computer listings other than AFOLDS and BLIS retrievals, compile data for motor vehicle maintenance summaries, analyze performance indicator data, enter vehicle maintenance data to computer, transcribe information onto punch cards transcript forms (AF Form 1530), enter and edit status of variable data on data collection forms, maintain computer listing files, review punch card transcript forms, keypunch computer cards, update vehicle master records (A, B, and C cards), and write correspondence.

C. Vehicle Maintenance Coordinator (GRP043, N=8). Representing only two percent of the survey sample, this group performed varied functions in the career ladder structure. Their job is split primarily between maintenance analysis and maintenance control functions (37 and 28 percent respectively), with a sizeable amount of time (15 percent) being spent performing maintenance scheduling and contract maintenance monitoring functions. Incumbents review limited technical inspection-motor vehicle forms (AFTO Form 91), coordinate vehicle disposition with vehicle maintenance personnel, prepare limited technical inspection-motor vehicles forms (AFTO Form 91), advise in preparation of limited technical inspection-motor vehicle forms, calculate vehicle repair costs, prepare vehicle storage and shipment documentation, perform completed contract maintenance work acceptance inspections, coordinate movement of vehicles or vehicle components to or from contract maintenance, evaluate necessity for contract maintenance, review workload of vehicles in contract maintenance, coordinate transportation of warranty items, to or from dealers, and review downtime of vehicles in contract maintenance.

III. NCOIC, MAINTENANCE CONTROL AND ANALYSIS (GRP049, N=21). This is the first of four independent job types (six percent of the survey sample). These supervisors are still involved with vehicle maintenance analysis and control functions. The incumbents, however, are involved heavily with supervisory duties. Incumbents write correspondence; supervise AFSC 47234 vehicle maintenance control and analysis specialists; prepare APRs; counsel personnel on personal or military-related problems; interpret policies, directives, or procedures, for subordinates; determine work priorities; establish performance standards for subordinates; coordinates vehicle maintenance problems with other units or agencies, assign personnel to duty positions, and supervise civilian personnel. Ninety-five percent of the members feel their job is interesting while 100 percent feel their talents are well utilized. Likewise, 95 percent feel their training is well utilized (see Table 7).

IV. JUNIOR VEHICLE MAINTENANCE DATA CONTROL ANALYST (GRP053, N=30). The second of four independent job types (nine percent of the survey sample), this group is heavily involved with the maintenance analysis functions. This is a highly specialized group, spending 80 percent of their time on only 43 tasks. The vast majority of their time (74 percent) is spent performing tasks in the maintenance analysis function. Incumbents

analyze VIMS inputs or reports, review VIMS data transcribe information onto punch card transcript forms (AF Form 1530), enter vehicle maintenance data to computer, maintain computer listing files, enter and edit status of variable data on data collection forms, keypunch computer cards, coordinate movement of computer products to or from data automation section, establish or update employee master records, update vehicle master records (A, B, and C cards), and compile information for reports or staff studies. Seventy-three percent of the members feel their job is interesting while 80 percent feel their talents are well utilized. Likewise, 80 percent feel their training is well utilized (see Table 7).

**V. VEHICLE CONTRACT MAINTENANCE MONITOR (GRP017, N=14).** The third independent job type (four percent of the survey sample), the members of this group spend virtually two thirds of their time in two of seven duty areas. Incumbents spend 35 and 31 percent of their time in maintenance control and maintenance scheduling and contract maintenance monitoring functions, respectively. Members coordinate movement of vehicles or vehicle components to or from control maintenance; prepare request for purchase forms (AF Form 9), review workload of vehicles in contract maintenance; evaluate necessity for contract maintenance, review downtime of vehicles in contract maintenance; coordinate transportation of warranty items to or from dealers, perform completed contract maintenance work acceptance inspections; calculate vehicle repair costs; write correspondence; review contract maintenance fund utilization; and maintain status boards, graphs, or charts. In contrast to the previous groups only 43 percent of the members feel their job is interesting, while 79 percent feel their talents are well utilized. Likewise, 86 percent feel their training is well utilized (see Table 7).

**VI. TECHNICAL SCHOOL INSTRUCTOR (GRP079, N=5).** The fourth and final independent job type in the Vehicle Maintenance Control and Analysis career ladder (1 percent of the survey sample) perform a specifically unique function. As expected, these incumbents spend the majority of their time (58 percent) performing specialized tasks in the training function. Eighty percent of their time is spent performing 58 tasks, such as administer tests, advise staff or unit personnel on training matters, demonstrate how to locate technical information, score tests, evaluate progress of resident course students, maintain study reference files, write test questions, conduct resident course classroom training, counsel trainees on training progress, develop lesson plans, and write training reports. One hundred percent of the members feel their job is interesting while 80 percent feel their talents are well utilized. Likewise, 80 percent of their training is well utilized (see Table 7).

### Comparison of Specialty Jobs

While the previous section described each job separately, this section compares the groups to highlight important differences and similarities among them. Tables 5 through 7 present several characteristics of each cluster and independent job type. The majority of the sample were mostly technically-oriented jobs. The nontechnical job groups contained personnel who were significantly more experienced than the general Vehicle Maintenance Control and Analysis personnel. These groups were management oriented and were made up primarily of 7-skill level members.

In addition to the data just discussed, Tables 5 through 7 also display the job difficulty index (JDI) and average task difficulty per unit time spent (ATDPUTS). As its name suggests, the ATDPUTS reflects the average difficulty of tasks group members spend most of their time on. The JDI is an index of relative job difficulty, based on the ATDPUTS, as well as the number of tasks the group performs. As Table 6 shows, the Vehicle Production Analysis Cluster had one of the more difficult jobs in the career ladder. Two of the four independent job types, NCOIC, Maintenance Control and Analysis, and Technical Instructors, had above average JDIs. While job difficulty may vary from group to group for a variety of reasons, the fact that the ATDPUTS for most groups in this study were fairly similar suggest that most differences in JDI were due mainly to differences in the number of tasks performed. If so, then groups with high JDIs simply performed more tasks and thus have a broader job than groups with low JDIs. In fact, this conclusion is borne out by the "average number of tasks performed" entry for each group in Tables 5 through 7.

Another interesting comparison between groups concerns their job satisfaction. Tables 8, 9, and 10 show how each group felt about their job in terms of how interesting they found it, how well it used their talents and training, how satisfied they were with the sense of accomplishment their job brought them, and whether they planned to reenlist. Overall, the job satisfaction indices are high, with an exceptionally high level of reenlistment intentions.

In summary, the picture presented here is of a highly technical job. The degree of difficulty is primarily determined by the number of tasks performed by a particular group. Regardless of job groups, career ladder members were overall, very happy with their work, and above average in reenlistment intentions.

TABLE 5  
BACKGROUND DATA FOR THE VEHICLE PRODUCTION CONTROL CLUSTER

	JOB TYPES		
	VEHICLE PRODUCTION CONTROL CLUSTER (GRP026)	VEHICLE CONTROL ANALYST (GRP099)	VEHICLE MAINTENANCE ANALYST (GRP094)
NUMBER IN GROUP:	94	34	7
PERCENT OF SAMPLE:	28%	10%	2%
PERCENT IN CONUS:	61%	65%	29%
VEHICLE SCHEDULING ANALYST (GRP121)			67%
DAFSC DISTRIBUTION			
47234	79%	85%	86%
47274	18%	15%	14%
AVERAGE GRADE:			
AVERAGE MONTHS IN CAREER FIELD:	E-5	E-5	E-5
AVERAGE MONTHS IN SERVICE	42	42	74
	91	97	93
AVERAGE NUMBER OF TASKS PERFORMED:	40	30	46
*ATDPUTS:	4.5	4.4	4.9
JOB DIFFICULTY INDEX (JDI):	9	6.8	12.3
(AVERAGE JDI = 13.00)			
PERCENT SUPERVISING:	13%	12%	-
AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT	39	4.6	4.6
		12.3	9.1

\*AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT

TABLE 6

BACKGROUND DATA FOR THE VEHICLE PRODUCTION ANALYSIS CLUSTER  
(PERCENT MEMBERS RESPONDING)

	JOB TYPES			
	SENIOR VEHICLE MAINTENANCE	SENIOR VEHICLE MAINTENANCE	VEHICLE MAINTENANCE	MAINTENANCE COORDINATOR (GRP043)
VEHICLE PRODUCTION ANALYSIS CLUSTER (GRP037)				
NUMBER IN GROUP:	141	87	39	8
PERCENT OF SAMPLE:	42%	26%	12%	2%
PERCENT IN CONUS:	60%	58%	64%	75%
DAFSC DISTRIBUTION:				
47234	48%	39%	70%	75%
47274	48%	59%	30%	25%
AVERAGE GRADE:				
AVERAGE MONTHS IN CAREER FIELD:	E-6	E-6	E-5	E-5
AVERAGE MONTHS IN SERVICE:	60	65	57	46
120	129	105	120	
PERCENT SUPERVISING:				
AVERAGE NUMBER OF TASKS PERFORMED:	58%	69%	31%	50%
*ATDPUTS:	96	118	63	51
JOB DIFFICULTY INDEX (JDI):	5.1	5	5.2	4.8
(AVERAGE JDI = 13.00)	17.2	18.5	16	11.7

\*AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT

TABLE 7  
BACKGROUND DATA FOR INDEPENDENT JOB TYPES

	NCOICs MAINTENANCE CONTROL AND ANALYSIS (GRP049)	VEHICLE MAINTENANCE DATA CONTROL ANALYST (GRP053)	JUNIOR VEHICLE MAINTENANCE MONITOR (GRP017)	TECHNICAL SCHOOL INSTRUCTOR (GRP079)
NUMBER IN GROUP:	21	30	14	5
PERCENT OF SAMPLE:	6%	9%	4%	1%
PERCENT IN CONUS:	67%	83%	93%	100%
DAFSC DISTRIBUTION				
47234	-	80%	50%	40%
47274	95%	20%	50%	60%
47299	5%	-	-	-
AVERAGE GRADE:	E-7	E-5	E-5	E-6
AVERAGE MONTHS IN CAREER FIELD:	68	44	49	61
AVERAGE MONTHS IN SERVICE:	169	89	107	139
PERCENT SUPERVISING:	100%	20%	28%	40%
AVERAGE NUMBER OF TASKS PERFORMED:	60	34	25	62
*AID/PUTS:	5	5	5	5
JOB DIFFICULTY INDEX (JDI): (AVERAGE JDI = 13.00)	15	11	8	14

\* AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT

TABLE 8  
JOB SATISFACTION INDICES FOR THE VEHICLE PRODUCTION CONTROL CLUSTER  
(PERCENT RESPONDING)

	JOB TYPES			
	VEHICLE PRODUCTION CONTROL CLUSTER (N=94)	VEHICLE CONTROL ANALYST (N=34)	VEHICLE MAINTENANCE ANALYST (N=7)	VEHICLE SCHEDULING ANALYST (N=6)
<u>I FIND MY JOB:</u>				
INTERESTING	73	68	86	67
SO-SO	12	15	-	17
DULL	13	15	14	17
<u>MY JOB UTILIZES MY TALENTS:</u>				
FAIRLY WELL TO PERFECTLY	80	68	86	100
VERY LITTLE OR NOT AT ALL	19	29	14	-
<u>THE SENSE OF ACCOMPLISHMENT GAINED FROM MY JOB LEAVES ME:</u>				
SATISFIED	64	53	71	83
AMBIVALENT	9	12	14	-
DISSATISFIED	27	32	14	17
<u>MY REENLISTMENT INTENTIONS ARE:</u>				
YES	73	65	71	67
NO	21	29	29	33
NO, I WILL RETIRE WITH AT LEAST 20 YEARS ACTIVE MILITARY SERVICE	4	3	-	-

\*NOTE: COLUMNS MAY NOT TOTAL 100 PERCENT DUE TO NO RESPONSE

TABLE 9

JOB SATISFACTION INDICES FOR THE VEHICLE PRODUCTION ANALYSIS CLUSTER  
(PERCENT RESPONDING)

	JOB TYPES			
	VEHICLE PRODUCTION ANALYSIS CLUSTER (N=141)	VEHICLE MAINTENANCE ANALYSIS TECHNICIAN (N=87)	SENIOR VEHICLE MAINTENANCE DATA CONTROL ANALYST (N=39)	VEHICLE MAINTENANCE COORDINATOR (N=8)
<u>I FIND MY JOB:</u>				
INTERESTING	84	84	82	87
SO-SO	10	9	13	-
DULL	4	2	5	12
<u>MY JOB UTILIZES MY TALENTS:</u>				
FAIRLY WELL TO PERFECTLY	87	85	87	100
VERY LITTLE OR NOT AT ALL	13	15	13	-
<u>THE SENSE OF ACCOMPLISHMENT GAINED</u>				
<u>FROM MY JOB LEAVES ME:</u>				
SATISFIED	71	68	77	87
AMBIVALENT	8	10	5	-
DISSATISFIED	21	22	18	12
<u>MY REENLISTMENT INTENTIONS ARE:</u>				
YES	76	73	82	100
NO	10	10	5	-
NO, I WILL RETIRE WITH AT LEAST 20 YEARS ACTIVE MILITARY SERVICE	13	16	13	-

\*NOTE: COLUMNS MAY NOT TOTAL 100 PERCENT DUE TO NO RESPONSE

TABLE 10  
JOB SATISFACTION INDICES FOR THE INDEPENDENT JOB TYPES  
(PERCENT RESPONDING)

	NONCJs MAINTENANCE CONTROL AND ANALYSIS (GRP049)	JUNIOR VEHICLE MAINTENANCE	DATA CONTROL ANALYST (GRP053)	VEHICLE MAINTENANCE MONITOR (GRP017)	TECHNICAL SCHOOL INSTRUCTOR (GRP079)
<u>I FIND MY JOB:</u>					
INTERESTING	95	73	43	100	-
SO-SO	-	20	36	-	-
DULL	5	7	-	-	-
<u>MY JOB UTILIZES MY TALENTS:</u>					
FAIRLY WELL TO PERFECTLY	100	80	79	80	20
VERY LITTLE OR NOT AT ALL	-	20	21	-	-
<u>THE SENSE OF ACCOMPLISHMENT GAINED FROM MY JOB LEAVES ME:</u>					
SATISFIED	71	57	71	80	-
AMBIVALENT	19	13	7	-	-
DISSATISFIED	9	30	21	20	-
<u>MY REENLISTMENT INTENTIONS ARE:</u>					
YES	71	67	79	80	-
NO	5	23	14	-	-
NO, I WILL RETIRE WITH AT LEAST 20 YEARS ACTIVE MILITARY SERVICE	24	10	7	20	-

\*NOTE: COLUMNS MAY NOT TOTAL 100 PERCENT DUE TO NO RESPONSE

## ANALYSIS OF DAFSC GROUPS

An analysis of skill-level groups (based on duty Air Force specialty codes--DAFSCs), in conjunction with the analysis of the career ladder structure, is an important part of each occupational analysis. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information is also used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standard (STS), reflect what career ladder personnel are actually doing in the field.

A comparison of duty and task performance between DAFSCs 47234 and 47274 indicated that the jobs they perform are essentially the same.

The distribution of skill level groups across the career ladder job clusters and independent job types is displayed in Table 11, while Table 12 presents the relative percent time spent on each duty across the skill level groups. A typical pattern of progression is present with personnel spending more of their relative time on duties involving supervisory and administrative tasks (Duties A, B, C, and D) as they move upward to the 7-skill level (see Table 12). Specific skill-level groups are discussed below.

### Skill Level Descriptions

DAFSC 47234. Three-skill level personnel, representing 56 percent of the survey sample, performed an average of 55 tasks, with 36 tasks accounting for over 50 percent of their job time. Performing a highly technical job, 81 percent of their relative job time is devoted to activities involving maintenance analysis functions, maintenance control functions, and maintenance scheduling and contract maintenance monitoring functions. The majority of these airmen (67 percent) prepare vehicle and equipment work order forms; prepare vehicle historical record forms; answer inquiries by or notify organizations concerning vehicle status; maintain status boards, graphs, or charts; perform final closeout and verification of work orders; review motor vehicle equipment work orders for correctness of information to be keypunched; issue USAF Vehicle Serv-O-Plate forms; and review vehicle historical record forms for repetitive maintenance. Table 13 provides additional tasks performed by group members and display the extent of technical and nontechnical work performed.

DAFSC 47274. The 136 personnel at the 7-skill level performed an average of 73 tasks, with 60 tasks comprising over 50 percent of their job time. With only 66 percent reporting supervisory responsibilities, many are supervisory technicians performing a combination of first-line supervisory and technical maintenance functions. Although supervision, management, and administrative type task performance are large features of the group, they still spend a significant amount of their total job time (61 percent) performing duties involving technical maintenance control, scheduling, and contract maintenance monitoring tasks. Table 14 presents representative tasks for the group and reflects the range of the job.

Differences between the 3- and 7-skill level groups are reflected by the listing of tasks in Table 15. It is clear that, while 7-skill level airmen still perform technical tasks, the group members clearly have the greatest responsibility for supervision, management, and training in the career ladder.

#### Summary

Career ladder progression is well defined, with personnel at the 3-skill level spending the vast majority of their job time performing technical tasks, while at the 7-skill level, supervisory and administrative type functions become more prevalent characteristics of the job. Although the 7-skill level group is more diversified than the 3-skill level group, both reflect performing many of the common technical tasks of the career ladder.

TABLE 11

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS CAREER LADDER  
CLUSTERS AND INDEPENDENT JOB TYPES  
(PERCENT MEMBERS)

<u>JOB GROUPS</u>	DAFSC 47234 (N=190)	DAFSC 47274 (N=136)
I. VEHICLE PRODUCTION CONTROL CLUSTER (N=94)	23	5
II. VEHICLE PRODUCTION ANALYSIS CLUSTER (N=141)	14	14
III. NCOIC, MAINTENANCE CONTROL AND ANALYSIS (N=21)	0	28
IV. JUNIOR VEHICLE MAINTENANCE DATA CONTROL ANALYST (N=30)	24	6
V. VEHICLE CONTRACT MAINTENANCE MONITOR (N=14)	15	13
VI. TECHNICAL SCHOOL INSTRUCTOR (N=5)	12	16
VII. PERCENT NOT GROUPED	<u>12</u>	<u>18</u>
TOTAL	100	100

TABLE 12

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY DAFSC GROUPS

<u>DUTIES</u>	DAFSC 47234 (N=190)	DAFSC 47274 (N=136)
A ORGANIZATION AND PLANNING	4	9
B DIRECTING AND IMPLEMENTING	7	13
C INSPECTING AND EVALUATING	6	12
D TRAINING	2	5
E PERFORMING MAINTENANCE ANALYSIS FUNCTIONS	37	33
F PERFORMING MAINTENANCE CONTROL FUNCTIONS	36	20
G PERFORMING MAINTENANCE SCHEDULING AND CONTRACT MAINTENANCE MONITORING FUNCTIONS	<u>8</u>	<u>8</u>
TOTAL	100	100

TABLE 13  
REPRESENTATIVE TASKS PERFORMED BY DAFSC 47234 PERSONNEL

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=190)</u>
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	72
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS	72
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS	69
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	68
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS	65
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTIONS OF INFORMATION TO BE KEYPUNCHED	65
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS FOR REPETITIVE MAINTENANCE	64
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS	63
F178 CALCULATE VEHICLE REPAIR COSTS	62
F204 PREPARE VEHICLE STATUS REPORTS	61
F191 IDENTIFY VEHICLES ON VEHICLES DEADLINED FOR PARTS STATUS THAT REQUIRE SCHEDULED MAINTENANCE	61
E133 MAINTAIN COMPUTER LISTING FILES	60
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	60
F206 PREPARE WORK ORDER LOG AND QUALITY CONTROL RECORD FORMS	59
E164 REVIEW VIMS DATA	57
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEMS (VIMS) INPUTS OR REPORTS	56
F212 REVIEW VEHICLES AND EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	56
F188 DOCUMENT ACCIDENT REPAIR ACTIONS	56
F199 POST VEHICLE DEADLINED FOR MAINTENANCE OR VEHICLE DEADLINED FOR PARTS ACTION	52
F174 ASSIGN VEHICLE MAINTENANCE PRIORITIES	52
F201 PREPARE DEFERRED MAINTENANCE PARTS REQUESTS	52
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	51
F198 PERFORM YARD CHECKS	49
E121 ENTER AND EDIT STATIC OR VARIABLE DATA ON DATA COLLECTION FORMS	48
E122 ENTER VEHICLE MAINTENANCE DATA TO COMPUTER	47

AVERAGE NUMBER OF TASKS PERFORMED: 55

TABLE 14  
REPRESENTATIVE TASKS PERFORMED BY DAFSC 47274 PERSONNEL

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=136)</u>
B52 WRITE CORRESPONDENCE	77
B24 COORDINATE VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	71
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	70
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEMS INPUTS OR REPORTS	67
A4 DETERMINE WORK PRIORITIES	67
E164 REVIEW VIMS DATA	66
B25 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	65
C66 PREPARE VEHICLE INTEGRATED MANAGEMENT SYSTEMS (VIMS) DOCUMENTATION	64
E157 REVIEW MOTOR VEHICLE REPLACEMENT CODES	63
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS	63
B34 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	61
C62 PREPARE APRs	61
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	60
B37 SUPERVISE AFSC 47234 VEHICLE MAINTENANCE CONTROL AND ANALYSIS SPECIALISTS	60
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	59
C68 REVIEW PROGRESS AND COMPLETION OF WORK	59
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	58
F172 ADVISE IN PREPARATION OF LIMITED TECHNICAL INSPECTION MOTOR VEHICLE FORMS	58
B26 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	58
B21 COMPILE INFORMATION FOR REPORTS OF STAFF STUDIES	57
E107 ANALYZE PERFORMANCE INDICATOR DATA	57
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS	56
F212 REVIEW VEHICLES AND EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	53
A8 ESTABLISH MAINTENANCE SCHEDULES	51
C44 COORDINATE OUTLYING MAINTENANCE CONTROL WORK CENTERS WITH CENTRAL MAINTENANCE CONTROL CENTER	49

AVERAGE NUMBER OF TASKS PERFORMED: 73

TABLE 15  
TASKS WHICH BEST DIFFERENTIATE BETWEEN 3- AND 7-SKILL LEVEL PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASK	DAFSC 47234 (N=190)	DAFSC 47279 (N=136)	DIFFERENCES
F206 PREPARE WORK ORDER LOG AND QUALITY CONTROL RECORD FORMS (AF FROM 754)	59	36	+23
F201 PREPARE DEFERRED MAINTENANCE PARTS REQUESTS	52	29	+23
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	69	50	+19
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	65	46	+19
F191 IDENTIFY VEHICLES ON VEHICLE DEADLINED FOR PARTS STATUS THAT REQUIRE SCHEDULED MAINTENANCE	61	42	+19
F199 POST VEHICLE DEADLINED FOR MAINTENANCE OR VEHICLE DEADLINED FOR PARTS ACTION	52	34	+18
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	60	42	+18
F202 PREPARE OPERATORS INSPECTION GUIDE AND TROUBLE REPORT FORMS (AFTO FORMS 371, 373, 374, 1800, AND 1812)	33	16	+17
E133 MAINTAIN COMPUTER LISTING FILES	60	47	+12
F204 PREPARE VEHICLE STATUS REPORTS	61	49	+12
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	64	53	+11
F188 DOCUMENT ACCIDENT REPAIR ACTIONS	56	46	+10
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252 A)	73	63	+10
B40 SUPERVISE MILITARY PERSONNEL OTHER THAN AFSC 472X4	13	38	-25
C46 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	22	48	-26
A6 DEVELOP WORK METHODS OR PROCEDURES	28	54	-26
C56 EVALUATE TECHNICAL PROBLEMS	11	37	-26
A17 PLAN WORK ASSIGNMENTS	19	46	-27
A18 PREPARE JOB DESCRIPTIONS	8	35	-27
A13 PLAN BRIEFINGS	15	43	-28
B39 SUPERVISE CIVILIAN PERSONNEL	10	40	-30
A3 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	13	43	-30
B34 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	25	61	-36
A10 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	13	50	-37
B42 WRITE CORRESPONDENCE	39	77	-38
B25 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	25	65	-40
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	12	53	-41
C62 PREPARE APRs	20	61	-41
B37 SUPERVISE AFSC 74234 VEHICLE MAINTENANCE CONTROL AND ANALYSIS SPECIALISTS	17	60	-43

## ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data were compared to the AFR 39-1 Specialty Descriptions for the 472X4 career ladder, dated 1 January 1982. The comparison showed that the 3- and 7-skill level descriptions accurately display the technical nature of the job. In addition, the staff and supervisory functions are clearly spelled out in the 7-skill level description.

## ANALYSIS OF TICF\* GROUPS

Utilization patterns for survey respondents in different Time In Career Field (TICF) groups were reviewed to determine if there were differences in tasks performed. As is generally true in most career ladders, as time in career field increased, there was a corresponding increase in performance of duties involving supervisory and managerial functions (see Table 16). Yet, even the most experienced incumbents still performed some of the technical functions in varying degrees. Note the drop-off of time spent in Maintenance Control Functions (Duty F) for 97+ groups in Table 16. The tasks performed by more senior personnel (97+ TICF) are illustrated in Table 17, which reflects a mix of technical and management responsibilities.

\* Time In Career Field

### Job Satisfaction Data

Comparisons of group perceptions of their jobs help career field managers to understand some of the factors which may effect the job performance of today's airmen. These perceptions were captured by four job satisfaction questions covering job interest, perceived utilization of talents and training, and reenlistment intentions. Table 18 presents data displaying the responses of selected TICF groups. Comparisons were also made between comparative samples of all other Direct Support career ladders surveyed in 1982 (see Table 18). Comparison of the groups reflect that most job satisfaction indicators for 472X4 airmen are higher than the comparative sample group, with reenlistment intentions significantly higher in the 1-48 TICF, but relatively the same for 49-96 and 97+ months TICF.

TABLE 16

## RELATIVE PERCENT TIME SPENT ON DUTIES BY TICF GROUPS

DUTIES	MONTHS TICF						241+ (N=2)
	1-24 (N=86)	25-48 (N=121)	1-48 (N=207)	49-96 (N=67)	97-144 (N=37)	145-192 (N=21)	
A ORGANIZATION AND PLANNING	6	6	6	5	6	9	9
B DIRECTING AND IMPLEMENTING	8	9	9	10	11	16	12
C INSPECTING AND EVALUATING	8	8	8	8	9	11	14
D TRAINING	2	3	2	4	5	3	6
E PERFORMING MAINTENANCE ANALYSIS FUNCTIONS	35	35	35	33	41	37	28
F PERFORMING MAINTENANCE CONTROL FUNCTIONS	34	30	32	33	20	19	23
G PERFORMING MAINTENANCE SCHEDULING AND CONTRACT MAINTENANCE MONITORING FUNCTIONS	7	9	8	7	8	5	8
	100	100	100	100	100	100	100

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY 472X4 PERSONNEL WITH  
97+ MONTHS TICF

TASKS	PERCENT MEMBERS PERFORMING (N=63)
B42 WRITE CORRESPONDENCE	81
E164 REVIEW VIMS DATA	75
B24 COORDINATE VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	75
E107 ANALYZE PERFORMANCE INDICATOR DATA	73
C66 PREPARE INTEGRATED MANAGEMENT SYSTEM (VIMS) DOCUMENTATION	73
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS); 'INPUTS OR REPORTS	73
B21 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	71
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	71
B26 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	68
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	68
*E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252/1252A).	65
E159 REVIEW REGISTERED EQUIPMENT MAINTENANCE (REM) LISTINGS	65
*A4 DETERMINE WORK PRIORITIES	67
E149 REVIEW MANHOUR ACCOUNTING REPORTING SYSTEMS	63
C62 PREPARE APRs	63
B25 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	62
E131 KEYPUNCH COMPUTER CARDS	62
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	62
B34 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	60
E162 REVIEW VEHICLE MANHOUR UTILIZATION REPORTS	60
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	60
F178 CALCULATE VEHICLE REPAIR COSTS	60
E168 UPDATE VEHICLE MASTER RECORDS (A, B, AND C CARDS)	60
E125 ESTABLISH VEHICLE MASTER RECORDS (A, B, AND C CARDS)	60
F182 COORDINATE RECORD OF CANNIBALIZATION (VEHICLE MAINTENANCE)	59
E138 PREPARE INDIRECT LABOR TIME CARD FORMS (AF FORM 1831)	59

TABLE 18

COMPARISON OF JOB SATISFACTION INDICATORS BY TICF GROUPS  
(PERCENT MEMBERS RESPONDING)\*

	1-48 MONTHS TICF			49-96 MONTHS TICF			97+ MONTHS TICF		
	COMPARATIVE SAMPLE		472X4 (1980 & 82)** (N=996)	COMPARATIVE SAMPLE		472X4 (1980 & 82)** (N=812)	COMPARATIVE SAMPLE		472X4 (1980 & 82)** (N=846)
	472X4 (1980 & 82)** (N=207)	472X4 (1980 & 82)** (N=67)		472X4 (1980 & 82)** (N=37)	472X4 (1980 & 82)** (N=846)				
<u>I FIND MY JOB:</u>									
INTERESTING	76	69	84	69	69	68	68	72	72
SO-SO	12	16	9	17	17	24	24	15	15
DULL	9	15	6	14	14	5	5	13	13
<u>MY JOB UTILIZES MY TALENTS:</u>									
FAIRLY WELL TO PERFECTLY	82	77	85	77	77	84	84	77	77
LITTLE OR NOT AT ALL	18	23	15	23	23	16	16	23	23
<u>MY JOB UTILIZES MY TRAINING:</u>									
FAIRLY WELL TO PERFECTLY	80	75	75	75	75	76	76	75	75
LITTLE OR NOT AT ALL	20	25	25	25	25	24	24	25	25
<u>THE SENSE OF ACCOMPLISHMENT GAINED FROM MY JOB LEAVES ME:</u>									
SATISFIED	66	62	66	62	62	68	68	63	63
AMBIVALENT	11	9	8	9	9	8	8	12	12
DISSATISFIED	22	29	25	29	29	24	24	26	26
<u>MY REENLISTMENT INTENTIONS ARE:</u>									
YES	74	73	79	73	73	68	68	58	58
NO	16	27	15	27	27	8	8	42	42
NO, I WILL RETIRE WITH AT LEAST 20 YEARS ACTIVE MILITARY SERVICE	8	***	5	***	5	24	24	***	***

\* COLUMNS MAY NOT ADD TO 100 PERCENT DUE TO NONRESPONSES AND ROUNDING

\*\* COMPARATIVE SAMPLE OF 233X1, 555X0, 661X0, AND 751X3

\*\*\* RETIREMENT INTENTIONS NOT REPORTED FOR COMPARATIVE SAMPLE

## TRAINING ANALYSIS

Occupational survey data are one of the many sources of information which can be used to assist in the development of a training program which is relevant to the needs of personnel working in their first assignment within a career ladder. Factors which may be used in evaluating training are the percent of first-job (1-24 months TICF) or first-enlistment (1-48 months TAFMS) numbers performing tasks, along with training emphasis and task difficulty ratings (previously explained in the SURVEY METHODOLOGY section). These factors were used in evaluating the Specialty Training Standard (STS) and the Plan of Instruction (POI) for the 472X4 career ladder. Technical school personnel from the Chanute Technical Training Center, Chanute AFB IL, matched inventory tasks to appropriate sections of the STS and POI for Course 3ALR47234. It was this matching upon which comparisons were based. It should be noted that comments and tables presented in this section pertaining to questionable elements (or lack of elements) in the training documents are intended to highlight what appear to be possible problem areas. A complete computer listing reflecting the percent members performing, training emphasis ratings, and task difficulty ratings for each task, along with STS and POI matchings, has been forwarded to the technical school for their use in further detailed reviews of training documents. A summary of that information is described below.

### Training Emphasis

Table 19 lists the top 25 tasks which raters indicated were the most important for first-job training (as indicated by TE ratings); they are shown to provide some idea of the kinds of tasks senior technicians consider should be trained. These tasks dealt primarily with maintenance analysis and control functions and were performed by slightly less than a majority of first-job personnel (only six tasks indicates less than 40 percent performing). This would indicate that all are well suited for some form of common structured training unless other factors override such consideration. Further review of Table 19 reflects that all 25 tasks were matched to the 3ALR47234 POI, indicating they are currently taught in the technical school.

### Specialty Training Standard (STS)

A comprehensive review of STS 472X4, dated 29 November 1979, was made, comparing STS items to survey data. STS paragraphs containing general information or subject-matter knowledge requirements were not matched. The STS, generally, provides comprehensive coverage of the significant jobs performed and equipment maintained by personnel in the field, with survey data supporting significant paragraphs or subparagraphs.

A number of paragraphs in the STS with task performance proficiency codes assigned did not have inventory tasks matched to them. This could mean that an applicable task has not been matched, the element is inappropriately coded as a performance item rather than a knowledge item, or that there are no clearly defined inventory tasks appropriate to that element.

Subject-matter specialists and training personnel should review these elements in detail to assure that inclusion in the STS is justified. (If it is determined that there are no tasks in the inventory which can be matched to a valid performance element, it is requested that the subject-matter specialists draft the appropriate tasks statements and forward them to the Occupational Measurement Center for review and use in the next inventory rewrite.)

Tasks not matched to any element of the STS are listed at the end of the STS computer listing. These were reviewed to determine if they were concentrated around some common functions. There were seven tasks not referenced which were performed by 30 percent or more members. They were split fairly equally between maintenance analysis and maintenance control functions. See Table 20 for examples of the tasks not referenced. A complete listing of these tasks is included in the Training Extract of computer products provided with this report. All of the tasks not referenced need to be examined to determine if they should be added to the STS.

TABLE 19

## TASKS RATED HIGHEST IN TRAINING EMPHASIS

TASKS	TRAINING* EMPHASIS	TASK** DIFFICULTY	PERCENT MEMBERS PERFORMING 1-48 MO. TICF (N=121)
			TRAINING* EMPHASIS
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) INPUTS OR REPORTS	6.84	7.02	58.5
E125 ESTABLISH VEHICLE MASTER RECORDS (A, B, AND C CARDS)	6.74	4.77	49.8
E127 FORMAT AFOLDS RETRIEVALS	6.67	7.70	23.7
E168 UPDATE VEHICLE MASTER RECORDS (A, B, AND C CARDS)	6.42	4.51	49.3
C66 PREPARE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) DOCUMENTATION	6.37	6.42	47.8
E107 ANALYZE PERFORMANCE INDICATOR DATA	6.23	7.01	35.3
E121 ENTER AND EDIT STATUS OF VARIABLE DATA ON DATA COLLECTION FORMS	6.18	5.24	45.9
E123 ESTABLISH OR UPDATE EMPLOYEE MASTER RECORDS	6.09	4.73	37.7
E116 COMPILE DATA FOR MOTOR VEHICLE MAINTENANCE SUMMARIES	6.00	7.04	37.2
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	5.93	7.16	53.6
E164 REVIEW VIMS DATA	5.84	5.75	54.7
E104 ANALYZE AIR FORCE ON-LINE DATA SYSTEM (AFOLDS) RETRIEVALS	5.79	7.54	32.6
E131 KEYPUNCH COMPUTER CARDS	5.79	4.87	44.9
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	5.72	4.06	63.8
G216 DEVELOP ANNUAL SCHEDULED MAINTENANCE PLAY	5.70	6.06	38.2
E122 ENTER VEHICLE MAINTENANCE DATA TO COMPUTER	5.67	5.16	43.5
B6 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	5.65	4.98	65.7
F185 CORRECT MOTOR VEHICLE SOURCE DOCUMENT ERRORS	5.65	5.46	44.0
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	5.65	4.45	62.8
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	5.58	4.72	61.6
F178 CALCULATE VEHICLE REPAIR COSTS	5.56	5.11	56.5
E157 REVIEW MOTOR VEHICLE REPLACEMENT CODES	5.37	5.01	51.2
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	5.37	4.47	60.9
F212 REVIEW VEHICLES AND EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	5.37	4.99	54.6
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	5.28	4.20	52.7

\* TRAINING EMPHASIS AVERAGE = 2.6 AND SD = 1.9

\*\* TASK DIFFICULTY AVERAGE = 5 AND SD = 1

TABLE 20

SAMPLE TASKS NOT REFERENCED TO 472X4 STS  
(30 PERCENT OR MORE PERFORMING)

TASKS NOT REFERENCED	TRAINING EMPHASIS*	TASK DIFFICULTY**	PERCENT MEMBERS PERFORMING (N=207)
			PERCENT MEMBERS PERFORMING (N=207)
E131 KEYPUNCH COMPUTER CARDS	5.79	4.87	44
F199 POST VEHICLE DEADLINED FOR MAINTENANCE OR VEHICLE DEADLINED FOR PARTS ACTION	4.14	3.47	48
E139 PREPARE LIMITED TECHNICAL INSPECTION-MOTOR VEHICLE FORMS (AFTO FORM 91)	3.10	4.45	40
F198 PERFORM YARD CHECKS	3.09	2.71	48
F193 INSPECT VEHICLE DEADLINED FOR PARTS, VEHICLES FOR STORAGE AND PRESERVATION	2.79	3.77	31
A6 DEVELOP WORK METHODS OR PROCEDURES	2.30	5.88	35
G219 PERFORM COMPLETED CONTRACT MAINTENANCE WORK ACCEPTANCE INSPECTIONS	1.47	4.68	32

\* TRAINING EMPHASIS AVERAGE = 2.6 AND SD = 1.9; HIGH TE = 4.5

\*\* TASK DIFFICULTY AVERAGE = 5 AND SD = 1

### Plan of Instruction (POI)

Based on the previously mentioned assistance from technical school subject-matter specialists in matching inventory tasks to the 3ALR47234 POI, dated September 1981, a computer product was generated displaying the results of that matching process. Information furnished for consideration includes training emphasis (TE) and task difficulty (TD) ratings, as well as percent members performing data for first-job (1-24 months TICF) and (1-48 months TICF) personnel.

There were only two tasks with high training emphasis ratings not matched to the POI. There were numerous tasks with above average training emphasis or task difficulty ratings, with 30 percent or more of 1-48 month TICF personnel performing, which were not matched to POI blocks (see Table 21). This combination of factors indicates that formal training may be appropriate and that resident technical training could be supported.

When reviewing POI objective number I (Publications), we find that 37 hours have been dedicated to its coverage. Closer analysis of this objective shows that of 15 matched tasks, only five are performed by at least 30 percent members. This is misleading because one of the five tasks is repeated four times (C67 - Research regulations for work authorizations), leaving only two tasks that meet the requirements. Tasks meeting the 30 percent member performing criterion are: C67 - Research regulations for work authorizations and F207 - Review action taken on time compliance technical orders (TCTO), 39 and 38 percent, respectively. See Table 22 for a complete listing of tasks matched to the publications objective.

Subject-matter specialists and training management personnel should further evaluate the subject areas and tasks discussed above in an effort to resolve the necessity for training and the most effective method to accomplish it. It is further suggested that those tasks throughout the POI, particularly Block I, which reflect below average task difficulty ratings and just meet the 30 percent member performing criterion, be reviewed by those specialists to determine if FTD training or OJT may be more appropriate than resident course instruction. It appears that the amount of time allotted to Block I could be reduced considerably.

TABLE 21  
SAMPLE TASKS NOT REFERENCED TO C3ALR47234 P01 BLOCKS  
(30 PERCENT OR MORE PERFORMING)

EXAMPLES OF TASKS NOT REFERENCED	TRAINING EMPHASIS*	TASK DIFFICULTY**	PERCENT MEMBERS 1-48 MO. TICF (N=207)
E131 KEYPUNCH COMPUTER CARDS	5.79	4.87	44
E122 ENTER VEHICLE MAINTENANCE DATA TO COMPUTER	5.67	5.16	46
F198 PERFORM YARD CHECKS	3.09	2.71	48
E139 PREPARE LIMITED TECHNICAL INSPECTION- MOTOR VEHICLES FORMS (AFTO FORM 91)	3.10	4.45	34
F199 POST VEHICLE DEADLINED FOR MAINTENANCE OR VEHICLE DEADLINED FOR PARTS ACTION	4.14	3.47	48
F202 PREPARE OPERATORS INSPECTION GUIDE AND TROUBLE REPORT FORMS (AFTO FORMS 371, 373, 374, 1800, AND 1812)	1.86	2.54	26

\* TRAINING EMPHASIS AVERAGE = 2.6 AND SD = 1.9; HIGH TE = 4.5  
\*\* TASK DIFFICULTY AVERAGE = 5 AND SD = 1

TABLE 22  
TASKS MATCHED TO POI 3ALR47234 BLOCK I (PUBLICATIONS)

TASKS	TRAINING EMPHASIS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMING (1-48 MONTHS TICF)	
			1	48
B31    IMPLEMENT SECURITY PROGRAMS	.75	4.37	6	
A16    PLAN SECURITY PROGRAMS	.53	4.61	5	
*C67    RESEARCH REGULATIONS FOR WORK AUTHORIZATIONS	2.16	5.68	39	
E119    DETERMINE TECHNICAL ORDER REQUIREMENTS	1.91	4.56	14	
E135    PERFORM ANNUAL INSPECTION OF ADMINISTRATIVE AND TECHNICAL ORDER PUBLICATIONS FILES	1.16	4.80	13	
A12    ESTABLISH PUBLICATION LIBRARIES	1.07	5.41	9	
*C67    RESEARCH REGULATIONS FOR WORK AUTHORIZATIONS	2.16	5.68	39	
F207    REVIEW ACTION TAKEN ON TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	3.93	4.70	38	
E144    PROPOSE CHANGES TO TECHNICAL PUBLICATIONS	.88	5.09	7	
*C67    RESEARCH REGULATIONS FOR WORK AUTHORIZATIONS	1.65	4.56	12	
E167    UPDATE TO FILES	2.16	5.68	39	
E135    PERFORM ANNUAL INSPECTION OF ADMINISTRATIVE AND TECHNICAL ORDER PUBLICATIONS FILES	1.65	4.56	12	
E124    ESTABLISH TECHNICAL ORDER SUBACCOUNTS	.83	4.48	10	
*C67    RESEARCH REGULATIONS FOR WORK AUTHORIZATIONS	2.16	5.68	39	

\* INDICATES REPEATED TASK

## AFSC CONVERSION DATA

Since this is a newly created AFSC, a question was inserted into the inventory to ascertain the AFSC conversion mix. Table 23 shows converted AFSCs. A combined 78 percent or more came from related AFSCs or previous 391X0 AFS. Fifty-four percent of the incumbents were from the Vehicle Maintenance area, while 24 percent were converted from the previous 391X0 AFS. Less than two percent each came from 20 other unrelated AFSCs.

TABLE 23  
CONVERTED AFSCs

<u>NUMBER OF PERSONNEL</u>	<u>AFSC</u>	<u>TITLE</u>
45	39170	MAINTENANCE SYSTEMS ANALYSIS TECHNICIAN
36	39150	MAINTENANCE SYSTEMS ANALYSIS SPECIALIST
39	47252	GENERAL PURPOSE VEHICLE MECHANIC
33	47271	SPECIAL VEHICLE AND BASE VEHICLE EQUIPMENT SUPERVISOR
26	47251	SPECIAL VEHICLE MECHANIC
30	47253	VEHICLE BODY MECHANIC
19	47250	BASE VEHICLE EQUIPMENT MECHANIC
17	47275	GENERAL PURPOSE VEHICLE AND BODY MAINTENANCE SUPERVISOR
16	47252	GENERAL PURPOSE VEHICLE MECHANIC
4	60350	VEHICLE OPERATOR/DISPATCHER
4	70250	ADMINISTRATION SPECIALIST

269 \*

\*AFSCs WITH LESS THAN FOUR INCUMBENTS NOT LISTED

## MAJCOM COMPARISONS

Tasks and background data for personnel of the four major commands (MAJCOM) with the largest 472X4 populations were compared to determine whether job content varied as a function of MAJCOM assignment.

Generally, the commands were devoting similar amounts of time to the performance of tasks pertaining to general technical maintenance and the associated maintenance administration functions (see Table 24). Typical common tasks included preparing vehicle historical record forms, answering inquiries by or notifying organizations concerning vehicle status, performing final closeout and verification of work orders, and establish maintenance schedules.

### Summary

Many general vehicle maintenance control, scheduling, and analysis tasks are performed commonly across all MAJCOMs, with the differences being in percent time spent or percent members performing specified tasks.

TABLE 24  
AVERAGE PERCENTAGE OF TIME SPENT ON DUTIES BY MAJCOM GROUPS

<u>DUTIES</u>	<u>SAC (N=81)</u>	<u>TAC (N=73)</u>	<u>USAFE (N=60)</u>	<u>MAC (N=41)</u>
A ORGANIZING AND PLANNING	5	7	7	6
B DIRECTING AND IMPLEMENTING	9	10	10	9
C INSPECTING AND EVALUATING	9	8	9	8
D TRAINING	2	2	2	4
E PERFORMING MAINTENANCE ANALYSIS FUNCTIONS	36	34	32	37
F PERFORMING MAINTENANCE CONTROL FUNCTIONS	31	30	31	29
G PERFORMING MAINTENANCE SCHEDULING AND CONTRACT MAINTENANCE MONITOR- ING FUNCTIONS	<u>8</u>	<u>9</u>	<u>8</u>	<u>7</u>
TOTAL	100	100	100	100

## ANALYSIS OF CONUS-OVERSEAS GROUPS

Comparisons were made of the tasks performed and background data for the 223 DAFSC 472X4 personnel assigned to the continental United States (CONUS) versus the 114 airmen in the sample assigned to overseas locations. While CONUS personnel performed an average of 58 tasks, overseas members performed an average of 70 tasks, reflecting a slightly broader job than CONUS airmen. Differences between the CONUS and overseas groups are reflected by the listing of tasks in Table 25. Although the overseas group spends more time performing maintenance analysis and maintenance control duties, overall, the groups are essentially comparable.

Comparison of background data, such as grade, job difficulty index, average task difficulty, and time in service, revealed little difference between the groups. There is, however, an appreciable difference in the total time in career field, 50 months for CONUS versus 60 months for overseas personnel. There are some differences in some of the job satisfaction indicators displayed in Table 26. Personnel in the CONUS have higher percentages reporting that their talents are well used and more of them gain a sense of accomplishment from their work. Job interest and reenlistment intentions are about the same for both groups. As can be seen in Table 26, the sense of accomplishment gained from the job is considerably lower for overseas members (56 percent) versus CONUS members (71 percent) for a 15 percent difference. Generally, the broader the job, the higher the job satisfaction indicators; just the opposite was found in this case. Of all the data analyzed, there was no obvious explanation for this finding.

TABLE 25

TASKS WHICH BEST DIFFERENTIATE BETWEEN  
CONUS AND OVERSEAS PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC-CONUS 472X4 (N=223)	DAFSC-OS 472X4 (N=114)	DIFFERENCE
E146 REVIEW COPARS INVOICES	41	6	+35
E169 VERIFY COPARS PRIOR DAY'S DOLLAR SALES	30	9	+21
E171 VERIFY VENDOR'S MONTHLY INVOICE	25	7	+18
.	.	.	.
.	.	.	.
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	54	69	-15
F204 PREPARE VEHICLE STATUS REPORTS	50	66	-16
E140 PREPARE MOTOR VEHICLE MAINTENANCE SUMMARIES	28	44	-16
F177 CALCULATE VEHICLE MAINTENANCE DATA STANDARD DEVIATIONS	16	32	-16
F175 CALCULATE MOTOR VEHICLE MISSION EQUIPMENT AVAILABILITIES	16	32	-16
F176 CALCULATE MOTOR VEHICLE MISSION MAINTENANCE CAPABILITIES	16	32	-16
F192 INITIATE ACTION TO HALT VEHICLE ABUSE	17	34	-17
E154 REVIEW MOTOR VEHICLE EQUIPMENT STATUS REPORTS	25	42	-17

TABLE 26  
JOB SATISFACTION DATA FOR CONUS AND OVERSEAS PERSONNEL  
(PERCENT RESPONDING)

	<u>472X4-CONUS</u> (N=223)	<u>472X4-OS</u> (N=114)
<u>I FIND MY JOB:</u>		
INTERESTING	78	74
SO-SO	13	12
DULL	7	10
<u>MY JOB UTILIZES MY TALENTS:</u>		
FAIRLY WELL TO PERFECTLY	85	78
VERY LITTLE OR NOT AT ALL	15	22
<u>THE SENSE OF ACCOMPLISHMENT GAINED FROM MY JOB LEAVES ME:</u>		
SATISFIED	71	56
AMBIVALENT	10	10
DISSATISFIED	17	34
<u>MY REENLISTMENT INTENTIONS ARE:</u>		
YES	73	74
NO	13	17
NO, I WILL RETIRE WITH AT LEAST 20 YEARS ACTIVE MILITARY SERVICE	12	8

## COMPARISON OF CURRENT 472X4 SURVEY TO PREVIOUS 391X0C SURVEY

In the 1973 study, most vehicle maintenance analysis personnel were identified as one cluster, separate from other types of maintenance analysis jobs (391X0A/B). In the present analysis, under the new specialty, it was possible to identify several variations of the vehicle maintenance analysis job. As noted in the SPECIALTY JOBS section of this report, 472X4 jobs are currently well defined and quite consistent with the specifications of AFR 39-1. The 1973 report also identified Instructors and Data Systems Design Analysts as distinct job groups (which included 390X0A and 390X0B personnel). A comparable Instructor job was identified in the present study, but no analog of the Data Systems Design Analyst job was found. Presumably, this job no longer exists or was retained in the 391X0 specialty when AFS 472X4 was established. (See Table 27 for comparison of 472X4/391X0C populations in 1982 to 1973 survey.)

TABLE 27

COMPARISON OF CLUSTERS AND INDEPENDENT JOB TYPES WITH SIGNIFICANT  
472X4/391XOC POPULATIONS IN 1982 SURVEY TO 1973 SURVEY

1982 SURVEY (N=227)	NUMBER IN GROUP		1973 SURVEY (N=APPROX. 120)	NUMBER IN GROUP
	1982 SURVEY (N=227)	1973 SURVEY (N=APPROX. 120)		
VEHICLE PRODUCTION CONTROL CLUSTER	94	-	-	-
VEHICLE PRODUCTION ANALYSIS CLUSTER	141	-	-	-
NCOIC, MAINTENANCE CONTROL AND ANALYSIS	21	-	-	-
VEHICLE MAINTENANCE DATA CONTROL ANALYST-JUNIOR	30	-	-	-
VEHICLE CONTRACT MAINTENANCE MONITOR	14	-	-	-
TECHNICAL SCHOOL INSTRUCTOR	5	-	-	-
INSTRUCTOR: MANAGEMENT CONCEPTS	*	-	-	-
DATA SYSTEMS DESIGN ANALYST	**	-	-	-
NCOIC REPORTS AND ANALYSIS, MAINTENANCE ANALYSIS TECH- NICIAN, MAINTENANCE ANALYSIS SPECIALIST	113	-	-	-

\* N=8 (AFSCs 39150C/39170C/39170A)

\*\* N=7 (AFSCs 39150A/70A/70B/W39170A/70C/90)

## COMPARISON WITH AFS 472X2 SURVEY

In a recent Occupational Survey Report, AFPT 90-472-442, August 1982, Base Vehicle Equipment, Special Vehicle, General Purpose Vehicle, and Vehicle Body Mechanics career ladders, it was noted that some similarities appeared between one of the identified job groups and DAFSC 472X4 (Vehicle Maintenance Control and Analysis). The job group was defined as follows:

VI. MAINTENANCE CONTROLLERS (GRP082, N=41). The members of this group performed a relatively low average number of tasks (26) which reflected the narrow scope of their job. The job these members performed appears to be similar to part of the job performed by DAFSC 472X4 (Vehicle Maintenance Control and Analysis) personnel. Basically, Maintenance Controllers scheduled work to be performed and maintained records of work completed. This typically involves making entries on numerous forms and records, along with performing maintenance control and administrative functions, such as: maintaining work control logs or work status boards, posting entries on vehicle historical record forms (AF Form 1828), reviewing vehicle historical record data for warranty scheduled maintenance, or repetitive maintenance, scheduling vehicle inspections, posting entries to vehicle and equipment work order forms (AF Form 1923) determining work priorities.

Forty-four percent of these members were general purpose Vehicle Mechanics (AFS 472X2), with 27 percent possessing a 7-skill level.

The analysis of the 472X4 specialty identified, via the cluster analysis diagram, a similar job group (GRP099, N=34) who were designated Vehicle Control Analysts. Members of this group, likewise, performed a relatively low average number of tasks (31). Airmen in this group perform a job that differs from others in the AFS 472X4 survey because of the high percentage of their time spent on tasks involving maintenance control functions. Incumbents perform final closeout and verification of work orders; answer inquiries by or notify organizations concerning vehicle status; maintain status boards, graphs, or charts; prepare vehicle historical record forms; prepare vehicle and equipment work order forms; and review motor vehicle equipment work orders for correction of information to be keypunched.

Close analysis of these two groups reveals still more similarities, MAINTENANCE CONTROLLERS (GRP082, N=41) perform a total of 200 tasks, with 75 percent of their time being spent on only 33 tasks. Likewise, VEHICLE CONTROL ANALYST (GRP099, N=34) perform 135 tasks, with 75 percent of their time being spent on only 29 tasks. The top tasks for 472X2 Maintenance Controllers (GRP082), with 66 percent or more members performing, are also performed by 472X4 Vehicle Control Analysts (GRP099) of the present survey (see Tables 28 and 29).

There are enough overlapping tasks between the 472X2 Maintenance Controllers and the 472X4 Vehicle Control Analysts to indicate the possibility of some misutilization of 472X2 personnel. While the number of personnel involved (N=41) is not large in comparison with the total 472XX population, this possible misutilization needs to be reviewed by classification personnel and Vehicle Maintenance managers. Unless there is some very strong rationale for using non-472X4 personnel in these jobs, perhaps the positions should be realigned as increased 472X4 authorizations.

TABLE 28  
 REPRESENTATIVE TASKS PERFORMED BY MAINTENANCE CONTROLLERS  
 (GRP082)  
 AFSC 472X2

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=41)</u>
E145 MAINTAIN WORK CONTROL LOGS OR WORK STATUS BOARDS	95
E156 POST ENTRIES TO VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	90
E163 REVIEW VEHICLE HISTORICAL RECORD DATA FOR WARRANTY, SCHEDULED MAINTENANCE, OR REPETITIVE MAINTENANCE	85
E164 SCHEDULE VEHICLE INSPECTIONS	83
E155 POST ENTRIES TO VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	80
A3 DETERMINE WORK PRIORITIES	73
E160 PREPARE VEHICLE REPAIR ESTIMATES	71
E161 PREPARE VEHICLE STATUS REPORTS	68
F170 MAINTAIN DEFERRED OR DELAYED PARTS, BOARDS, OR RECORDS	66
E140 DISPATCH MOBILE MAINTENANCE VEHICLES	66
E162 PROCESS RECORDS ON VEHICLES BEING RECEIVED, SHIPPED, OR TRANSFERRED	51

TABLE 29

VEHICLE CONTROL ANALYST  
(GRP099)  
AFSC 472X4

TASKS	PERCENT MEMBERS PERFORMING (N=34)
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	100
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	97
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	94
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	85
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	85
F204 PREPARE VEHICLE STATUS REPORTS	85
F191 IDENTIFY VEHICLES ON VEHICLE DEADLINED FOR PARTS STATUS THAT REQUIRE SCHEDULED MAINTENANCE	85
F206 PREPARE WORK ORDER LOG AND QUALITY CONTROL RECORD FORMS (AF FORM 754)	82
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	79
F199 POST VEHICLE DEADLINED FOR MAINTENANCE OR VEHICLE DEADLINED FOR PARTS ACTION	79
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	76
F212 REVIEW VEHICLES AND EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	76
F174 ASSIGN VEHICLE MAINTENANCE PRIORITIES	76
F201 PREPARE DEFERRED MAINTENANCE PARTS REQUESTS	74
F172 ADVISE IN PREPARATION OF LIMITED TECHNICAL INSPECTION-MOTOR VEHICLE FORMS (AFTO FORM 91)	74
F188 DOCUMENT ACCIDENT REPAIR ACTIONS	71
C44 COORDINATE OUTLYING MAINTENANCE CONTROL WORK CENTERS WITH CENTRAL MAINTENANCE CONTROL CENTER	68
F178 CALCULATE VEHICLE REPAIR COSTS	68

## IMPLICATIONS

The Vehicle Maintenance Control and Analysis career ladder appears to have become a relatively stable occupational area since its separation from the Maintenance Analysis career ladder in October 1978.

An analysis of the structure of the specialty based on a study of the similarity of tasks performed and the relative percent time spent on tasks, revealed two major clusters of jobs plus four independent job types. The two major clusters correspond largely with the present specialty breakout of 3- and 7-skill level tasks which tend to validate the present career ladder structure as depicted in AFR 39-1.

During the analysis of the structure of the specialty, it was observed that while most of the major job types reported fairly high levels of job interest and feelings that their talents were being utilized, the perceived sense of accomplishment gained from their jobs from some groups was somewhat lower. This implies that, although members of the career ladder are interested in their work and find the work challenging, a substantial percentage feel that there is some problem in being able to enjoy a sense of accomplishment. In spite of this finding, the reenlistment intentions, overall, are extremely high.

Based on review of the POI, there were only two tasks with high training emphasis ratings not matched. There were, however, several tasks with above average training emphasis or task difficulty ratings with 30 percent or more of 1-48 month TICF personnel performing which were not matched to POI blocks. This combination of factors suggests that formal training may be required and that some additional resident technical training could be supported.

A comparison of this study with other 472XX specialties revealed that there are some non-472X4 personnel (primarily 472X2 individuals) who perform what appears to be a 472X4 job. This possible misutilization of other specialties may reflect a need for additional 472X4 positions. This situation requires review by Vehicle Maintenance managers and classification officials.

**APPENDIX A**

**TASKS REPRESENTATIVE OF SPECIALTY JOBS**

TABLE I  
VEHICLE PRODUCTION CONTROL CLUSTER  
(GRP026)

TASKS	PERCENT MEMBERS PERFORMING (N=94)
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	94
F191 IDENTIFY VEHICLES ON VEHICLE DEADLINED FOR PARTS STATUS THAT REQUIRE SCHEDULED MAINTENANCE	90
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	88
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	88
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	85
F206 PREPARE WORK ORDER LOG AND QUALITY CONTROL RECORD FORMS (AF FORM 754)	84
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	82
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	79
F204 PREPARE VEHICLE STATUS REPROTS	79
F188 DOCUMENT ACCIDENT REPAIR ACTIONS	78
F199 POST VEHICLE DEADLINED FOR MAINTENANCE OR VEHICLE DEADLINED FOR PARTS ACTION	76
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	74
F178 CALCULATE VEHICLE REPAIR COSTS	74
F201 PREPARE DEFERRED MAINTENANCE PARTS REQUESTS	73
F174 ASSIGN VEHICLE MAINTENANCE PRIORITIES	73
F212 REVIEW VEHICLES AND EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	68
F172 ADVISE IN PREPARATION OF LIMITED TECHNICAL INSPECTION-MOTOR VEHICLE FORMS (AFTO FORM 91)	67
C44 COORDINATE OUTLYING MAINTENANCE CONTROL WORK CENTERS WITH CENTRAL MAINTENANCE CONTROL CENTER	62
F198 PERFORM YARD CHECKS	61
G227 SCHEDULE ONE-TIME OR SPECIAL INSPECTION	61
F182 COORDINATE RECORD OF CANNIBALIZATION (VEHICLE MAINTENANCE) FORMS (AF FORM 1832) WITH VEHICLE MAINTENANCE PERSONNEL	59
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252A)	57
A4 DETERMINE WORK PRIORITIES	56
A8 ESTABLISH MAINTENANCE SCHEDULES	55
F179 COMPARE ESTIMATED COST TO ACTUAL COSTS OF REPAIRS	54

TABLE II  
VEHICLE CONTROL ANALYST  
(GRP099)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=34)</u>
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	100
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	97
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	94
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	85
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	85
F204 PREPARE VEHICLE STATUS REPORTS	85
F191 IDENTIFY VEHICLES ON VEHICLE DEADLINED FOR PARTS STATUS THAT REQUIRE SCHEDULED MAINTENANCE	85
F206 PREPARE WORK ORDER LOG AND QUALITY CONTROL RECORD FORMS (AF FORM 754)	82
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	79
F199 POST VEHICLE DEADLINED FOR MAINTENANCE OR VEHICLE DEADLINED FOR PARTS ACTION	79
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	76
F212 REVIEW VEHICLES AND EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	76
F174 ASSIGN VEHICLE MAINTENANCE PRIORITIES	76
F201 PREPARE DEFERRED MAINTENANCE PARTS REQUESTS	74
F172 ADVISE IN PREPARATION OF LIMITED TECHNICAL INSPECTION-MOTOR VEHICLE FORMS (AFTO FORM 91)	74
F188 DOCUMENT ACCIDENT REPAIR ACTIONS	71
C44 COORDINATE OUTLYING MAINTENANCE CONTROL WORK CENTERS WITH CENTRAL MAINTENANCE CONTROL CENTER	68
F178 CALCULATE VEHICLE REPAIR COSTS	68
F200 PREPARE "IN COMMISSION RATE" REPORTS	56
F198 PERFORM YARD CHECKS	56
F202 PREPARE OPERATORS INSPECTION GUIDE AND TROUBLE REPORT FORMS (AFTO FORMS 371, 373, 374, 1800, and 1812)	53
F187 DISPATCH VEHICLE MAINTENANCE SERVICE CALLS	53
F182 COORDINATE RECORD OF CANNIBALIZATION (VEHICLE MAINTENANCE) FORMS (AF FORM 1832) WITH VEHICLE MAINTENANCE PERSONNEL	53
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252A)	50
A4 DETERMINE WORK PRIORITIES	47

TABLE III  
VEHICLE MAINTENANCE ANALYST  
(GRP094)

TASKS	PERCENT MEMBERS PERFORMING (N=7)
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	100
A8 ESTABLISH MAINTENANCE SCHEDULES	100
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) INPUTS OR REPORTS	100
E133 MAINTAIN COMPUTER LISTING FILES	100
F191 IDENTIFY VEHICLES ON VEHICLE DEADLINED FOR PARTS STATUS THAT REQUIRE SCHEDULED MAINTENANCE	100
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1823) FOR REPETITIVE MAINTENANCE	100
E158 REVIEW PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	100
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	86
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	86
E168 UPDATE VEHICLE MASTER RECORDS (A, B, AND C CARDS)	86
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	86
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	86
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	86
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	71
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252A)	71
E121 ENTER AND EDIT STATUS OF VARIABLE DATA ON DATA COLLECTION FORMS	71
F212 REVIEW VEHICLES AND EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	71
E164 REVIEW VIMS DATA	71
B21 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	71
C44 COORDINATE OUTLYING MAINTENANCE CONTROL WORK CENTERS WITH CENTRAL MAINTENANCE CONTROL CENTER	71
F206 PREPARE WORK ORDER LOG AND QUALITY CONTROL RECORD FORMS (AF FORM 754)	71
C43 ANALYZE WORKLOAD REQUIREMENTS	71
F174 ASSIGN VEHICLE MAINTENANCE PRIORITIES	71
E131 KEYPUNCH COMPUTER CARDS	71
F178 CALCULATE VEHICLE REPAIR COSTS	71

TABLE IV  
VEHICLE SCHEDULING ANALYST  
(GRP121)

TASKS	PERCENT MEMBERS PERFORMING (N=6)
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	100
F179 COMPARE ESTIMATED COST TO ACTUAL COSTS OF REPAIRS	100
F201 PREPARE DEFERRED MAINTENANCE PARTS REQUESTS	100
F188 DOCUMENT ACCIDENT REPAIR ACTIONS	100
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	100
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	100
F206 PREPARE WORK ORDER LOG AND QUALITY CONTROL RECORD FORMS	100
F191 IDENTIFY VEHICLES ON VEHICLE DEADLINED FOR PARTS STATUS THAT REQUIRE SCHEDULED MAINTENANCE	100
F178 CALCULATE VEHICLE REPAIR COSTS	100
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	83
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	83
G227 SCHEDULE ONE-TIME OR SPECIAL INSPECTION	83
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	83
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	83
F204 PREPARE VEHICLE STATUS REPORTS	83
F207 REVIEW ACTION TAKEN ON TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	83
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252A)	83
F194 MAINTAIN ACCIDENT OR ABUSE LOGS OR REPORTS	67
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	67
F199 POST VEHICLE DEADLINED FOR MAINTENANCE OR VEHICLE DEADLINED FOR PARTS ACTION	67
A8 ESTABLISH MAINTENANCE SCHEDULES	67
F198 PERFORM YARD CHECKS	67
F187 DISPATCH VEHICLE MAINTENANCE SERVICE CALLS	67
F184 COORDINATE VEHICLE DISPOSITION WITH VEHICLE MAINTENANCE	67
F174 ASSIGN VEHICLE MAINTENANCE PRIORITIES	67

TABLE V  
VEHICLE PRODUCTION ANALYSIS CLUSTER  
(GRP037)

TASKS	PERCENT MEMBERS PERFORMING (N=141)
E164 REVIEW VIMS DATA	90
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) INPUTS OR REPORTS	88
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252A)	88
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	86
E125 ESTABLISH VEHICLE MASTER RECORDS (A, B, AND C CARDS)	86
C66 PREPARE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) DOCUMENTATION	85
E157 REVIEW MOTOR VEHICLE REPLACEMENT CODES	84
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	82
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	82
B42 WRITE CORRESPONDENCE	82
E168 UPDATE VEHICLE MASTER RECORDS (A, B, AND C CARDS)	82
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	80
E107 ANALYZE PERFORMANCE INDICATOR DATA	79
B24 COORDINATE VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	79
E133 MAINTAIN COMPUTER LISTING FILES	79
E161 REVIEW SERV-O-PLATE ISSUED FILES	79
E116 COMPILE DATA FOR MOTOR VEHICLE MAINTENANCE SUMMARIES	78
E138 PREPARE INDIRECT LABOR TIME CARD FORMS (AF FORM 1831)	78
B21 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	77
E150 REVIEW MILES PER HOURS PER GALLON OF FUEL RATES REPORTS	76
F178 CALCULATE VEHICLE REPAIR COSTS	75
E162 REVIEW VEHICLE MAN-HOUR UTILIZATION REPORTS	75
E159 REVIEW REGISTERED EQUIPMENT MAINTENANCE (REM) LISTINGS	75
E153 REVIEW MOTOR VEHICLE COST PER MILE, HOUR, OR UNIT REPORTS	75
E158 REVIEW PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	74

TABLE VI  
VEHICLE MAINTENANCE ANALYSIS TECHNICIAN  
(GRP066)

TASKS	PERCENT MEMBERS PERFORMING (N=87)
B24 COORDINATE VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	94
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	93
B42 WRITE CORRESPONDENCE	92
A4 DETERMINE WORK PRIORITIES	91
E164 REVIEW VIMS DATA	90
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	90
F182 COORDINATE RECORD OF CANNIBALIZATION (VEHICLE MAINTENANCE) FORMS (AF FORM 1832) WITH VEHICLE MAINTENANCE PERSONNEL	90
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) INPUTS OR REPORTS	89
E125 ESTABLISH VEHICLE MASTER RECORDS (A, B, AND C CARDS)	89
E130 ISSUE USAF VEHICLE SERV-O-PLATE (AF FORM 1252 OR 1252A)	89
E157 REVIEW MOTOR VEHICLE REPLACEMENT CODES	87
C66 PREPARE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) DOCUMENTATION	86
E168 UPDATE VEHICLE MASTER RECORDS (A, B, AND C CARDS)	86
F184 COORDINATE VEHICLE DISPOSITION WITH VEHICLE MAINTENANCE PERSONNEL	86
E161 REVIEW SERV-O-PLATE ISSUED FILES	86
B21 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	85
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	85
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	84
C43 ANALYZE WORKLOAD REQUIREMENTS	84
F172 ADVISE IN PREPARATION OF LIMITED TECHNICAL INSPECTION-MOTOR VEHICLE FORMS (AFTO FORM 91)	84
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	83
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	83
F178 CALCULATE VEHICLE REPAIR COSTS	83
C68 REVIEW PROGRESS AND COMPLETION OF WORK	83
B26 DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	83

TABLE VII  
SENIOR VEHICLE MAINTENANCE DATA CONTROL ANALYST  
(GRP069)

TASKS	PERCENT MEMBERS PERFORMING (N=39)
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) INPUTS OR REPORTS	97
E164 REVIEW VIMS DATA	97
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	95
E116 COMPILE DATA FOR MOTOR VEHICLE MAINTENANCE SUMMARIES	95
E107 ANALYZE PERFORMANCE INDICATOR DATA	92
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	90
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252A)	90
E158 REVIEW PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	90
C66 PREPARE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) DOCUMENTATION	87
E133 MAINTAIN COMPUTER LISTING FILES	87
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	87
E162 REVIEW VEHICLE MAN-HOUR UTILIZATION REPORTS	87
E153 REVIEW MOTOR VEHICLE COST PER MILE, HOUR, OR UNIT REPORTS	87
E131 KEYPUNCH COMPUTER CARDS	85
E150 REVIEW MILES PER HOURS PER GALLON OF FUEL RATES REPORTS	85
E157 REVIEW MOTOR VEHICLE REPLACEMENT CODES	85
E125 ESTABLISH VEHICLE MASTER RECORDS (A, B, AND C CARDS)	85
E138 PREPARE INDIRECT LABOR TIME CARD FORMS (AF FORM 1831)	85
E122 ENTER VEHICLE MAINTENANCE DATA TO COMPUTER	82
E121 ENTER AND EDIT STATUS OF VARIABLE DATA ON DATA COLLECTION FORMS	82
E168 UPDATE VEHICLE MASTER RECORDS (A, B, AND C CARDS)	82
E118 COORDINATE MOVEMENT OF COMPUTER PRODUCTS TO OR FROM DATA AUTOMATION SECTION	79
E123 ESTABLISH OR UPDATE EMPLOYEE MASTER RECORDS	79
E149 REVIEW MAN-HOUR ACCOUNTING REPORTING SYSTEMS	79
E142 PREPARE OR POST COMPUTERIZED MAINTENANCE LISTINGS	74

TABLE VIII  
VEHICLE MAINTENANCE COORDINATOR  
(GRP043)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=8)</u>
E148 REVIEW LIMITED TECHNICAL INSPECTION-MOTOR VEHICLES FORMS (AFTO FORM 91)	100
F184 COORDINATE VEHICLE DISPOSITION WITH VEHICLE MAINTENANCE PERSONNEL	100
F172 ADVISE IN PREPARATION OF LIMITED TECHNICAL INSPECTION-MOTOR VEHICLE FORMS (AFTO FORM 91)	100
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252A)	88
E139 PREPARE LIMITED TECHNICAL INSPECTION - MOTOR VEHICLES FORMS (AFTO FORM 91)	88
E168 UPDATE VEHICLE MASTER RECORDS (A, B, AND C CARDS)	88
E125 ESTABLISH VEHICLE MASTER RECORDS (A, B, AND C CARDS)	88
E170 VERIFY MATERIAL INSPECTION AND RECEIVING REPORT FORMS (DD FORM 250)	55
F178 CALCULATE VEHICLE REPAIR COSTS	75
F205 PREPARE VEHICLE STORAGE AND SHIPMENT DOCUMENTATION	75
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	75
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	75
G215 COORDINATE TRANSPORTATION OF WARRANTY ITEMS TO OR FROM DEALERS	75
E164 REVIEW VIMS DATA	75
E161 REVIEW SERV-O-PLATE ISSUED FILES	75
C44 COORDINATE OUTLYING MAINTENANCE CONTROL WORK CENTERS WITH CENTRAL MAINTENANCE CONTROL CENTER	75
F203 PREPARE VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	75
G219 PERFORM COMPLETED CONTRACT MAINTENANCE WORK ACCEPTANCE INSPECTIONS	63
G217 EVALUATE NECESSITY FOR CONTRACT MAINTENANCE	63
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	63
G226 REVIEW WORKLOAD OF VEHICLES IN CONTRACT MAINTENANCE	63
F212 REVIEW VEHICLES AND EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	63
E159 REVIEW REGISTERED EQUIPMENT ASSIGNED REPLACEMENT CODES A THROUGH J	63
G224 REVIEW DOWNTIME OF VEHICLES IN CONTRACT MAINTENANCE	63
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	63

TABLE IX  
NCOIC MAINTENANCE CONTROL AND ANALYSIS  
(GRP049)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=21)</u>
C62 PREPARE APRs	100
B25 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	100
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	100
B42 WRITE CORRESPONDENCE	95
B34 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	90
A10 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	90
B37 SUPERVISE AFSC 47234 VEHICLE MAINTENANCE CONTROL AND ANALYSIS SPECIALISTS	86
A4 DETERMINE WORK PRIORITIES	86
B24 COORDINATE VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	86
A6 DEVELOP WORK METHODS OR PROCEDURES	86
C68 REVIEW PROGRESS AND COMPLETION OF WORK	76
A17 PLAN WORK ASSIGNMENTS	76
A3 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	76
D95 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	71
B39 SUPERVISE CIVILIAN PERSONNEL	67
B38 SUPERVISE AFSC 47274 VEHICLE MAINTENANCE CONTROL AND ANALYSIS TECHNICIANS	67
A13 PLAN BRIEFINGS	67
C48 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	67
C67 RESEARCH REGULATIONS FOR WORK AUTHORIZATIONS	67
A9 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	67
C58 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	67
B40 SUPERVISE MILITARY PERSONNEL OTHER THAN AFSC 472X4	62
C49 EVALUATE INSPECTION REPORTS OR PROCEDURES	62
C70 WRITE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRAISALS	62
C57 EVALUATE WORK SCHEDULES	62

TABLE X  
JUNIOR VEHICLE MAINTENANCE DATA CONTROL ANALYST  
(GRP053)

TASKS	PERCENT MEMBERS PERFORMING (N=30)
E108 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) INPUTS OR REPORTS	97
E165 TRANSCRIBE INFORMATION ONTO PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	97
E133 MAINTAIN COMPUTER LISTING FILES	97
E164 REVIEW VIMS DATA	93
E130 ISSUE USAF VEHICLE SERV-O-PLATE FORMS (AF FORM 1252 OR 1252A)	90
E122 ENTER VEHICLE MAINTENANCE DATA TO COMPUTER	83
E168 UPDATE VEHICLE MASTER RECORDS (A, B, AND C CARDS)	83
E131 KEYPUNCH COMPUTER CARDS	80
E123 ESTABLISH OR UPDATE EMPLOYEE MASTER RECORDS	80
E121 ENTER AND EDIT STATUS OF VARIABLE DATA ON DATA COLLECTION FORMS	77
E118 COORDINATE MOVEMENT OF COMPUTER PRODUCTS TO OR FROM DATA AUTOMATION SECTION	77
E125 ESTABLISH VEHICLE MASTER RECORDS (A, B, AND C CARDS)	73
E158 REVIEW PUNCH CARD TRANSCRIPT FORMS (AF FORM 1530)	70
E138 PREPARE INDIRECT LABOR TIME CARD FORMS (AF FORM 1831)	70
E159 REVIEW REGISTERED EQUIPMENT MAINTENANCE (REM) LISTINGS	63
E106 ANALYZE COMPUTER LISTINGS OTHER THAN AFOLDS AND BLIS RETRIEVALS	60
C66 PREPARE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) DOCUMENTATION	60
E162 REVIEW VEHICLE MAN-HOUR UTILIZATION REPORTS	60
E161 REVIEW SERV-O-PLATE ISSUED FILES	57
B21 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	53
F209 REVIEW MOTOR VEHICLE EQUIPMENT WORK ORDERS FOR CORRECTNESS OF INFORMATION TO BE KEYPUNCHED	50
E146 REVIEW COPARS INVOICES	47
E104 ANALYZE AIR FORCE ON-LINE DATA SYSTEM (AFOLDS) RETRIEVALS	47
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	47
E169 VERIFY COPARS PRIOR DAY'S DOLLAR SALES	43

TABLE XI  
VEHICLE CONTRACT MAINTENANCE MONITOR  
(GRP017)

TASKS	PERCENT MEMBERS PERFORMING (N=14)
G221 PREPARE REQUESTS FOR PURCHASE FORMS (AF FORM 9)	79
G226 REVIEW WORKLOAD OF VEHICLES IN CONTRACT MAINTENANCE	71
G224 REVIEW DOWNTIME OF VEHICLES IN CONTRACT MAINTENANCE	71
F181 COORDINATE MOVEMENT OF VEHICLES OR VEHICLE COMPONENTS TO OR FROM CONTRACT MAINTENANCE	64
G222 PREPARE VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	64
G217 EVALUATE NECESSITY FOR CONTRACT MAINTENANCE	57
G215 COORDINATE TRANSPORTATION OF WARRANTY ITEMS TO OR FROM DEALERS	57
F178 CALCULATE VEHICLE REPAIR COSTS	57
F173 ANSWER INQUIRIES BY OR NOTIFY ORGANIZATIONS CONCERNING VEHICLE STATUS	57
G219 PERFORM COMPLETED CONTRACT MAINTENANCE WORK ACCEPTANCE INSPECTIONS	50
B42 WRITE CORRESPONDENCE	50
E148 REVIEW LIMITED TECHNICAL INSPECTION-MOTOR VEHICLES FORMS (AFTO FORM 91)	50
B36 MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS	50
B24 COORDINATE VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	50
F172 ADVISE IN PREPARATION OF LIMITED TECHNICAL INSPECTION-MOTOR VEHICLE FORMS (AFTO FORM 91)	50
G223 REVIEW CONTRACT MAINTENANCE FUND UTILIZATION	43
F198 PERFORM YARD CHECKS	43
F194 MAINTAIN ACCIDENT OR ABUSE LOGS OR REPORTS	43
F184 COORDINATE VEHICLE DISPOSITION WITH VEHICLE MAINTENANCE PERSONNEL	43
F179 COMPARE ESTIMATED COST TO ACTUAL COSTS OF REPAIRS	43
F188 DOCUMENT ACCIDENT REPAIR ACTIONS	36
F196 PERFORM FINAL CLOSEOUT AND VERIFICATION OF WORK ORDERS	36
F211 REVIEW VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828) FOR REPETITIVE MAINTENANCE	36
F207 REVIEW ACTION TAKEN ON TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	36

TABLE XII  
TECHNICAL SCHOOL INSTRUCTOR  
(GRP079)

TASK	PERCENT MEMBERS PERFORMING (N=5)
D72 ADMINISTER TESTS	100
D73 ADVISE STAFF OR UNIT PERSONNEL ON TRAINING MATTERS	100
D81 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
D99 SCORE TESTS	100
D91 EVALUATE PROGRESS OF RESIDENT COURSE STUDENTS	100
D93 MAINTAIN STUDY REFERENCE FILES	100
D102 WRITE TEST QUESTIONS	100
D80 COUNSEL TRAINEES ON TRAINING PROGRESS	100
D95 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100
D94 MAINTAIN TRAINING EQUIPMENT	100
D83 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	100
D87 DIRECT OR IMPLEMENT TRAINING PROGRAMS OTHER THAN OJT	100
D92 EVALUATE TRAINING METHODS, TECHNIQUES, OR PROGRAMS	100
D97 PREPARE TRAINING SCHEDULES	100
D84 DEVELOP LESSON PLANS	100
D77 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	80
E167 UPDATE TO FILES	80
D88 ESTABLISH STUDY REFERENCE FILES	80
D103 WRITE TRAINING REPORTS	80
E119 DETERMINE TECHNICAL ORDER REQUIREMENTS	80
D100 WRITE JOB PROFICIENCY GUIDES (JPG)	80
A12 ESTABLISH PUBLICATION LIBRARIES	80
D98 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	80
D101 WRITE JUSTIFICATION FOR TRAINING FACILITIES, EQUIPMENT PUBLICATIONS, OR MATERIALS	80
D78 CONDUCT TRAINING CONFERENCES OR BRIEFINGS	80

PATE  
LME